THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

LSE

Welcome to the Department of Mathematics

MSc Operations Research and Analytics Handbook

lse.ac.uk/mathematics

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Welcome from the Head of Department

Welcome to the Department of Mathematics at LSE.

By joining one of our degree programmes, you become a member of a vibrant intellectual community, comprising excellent students (BSc, MSc and PhD), world-leading faculty, experienced professional services staff, and high-achieving alumni. By taking advantage of the rich and diverse learning environment at LSE, you can further develop your talents and advance your knowledge.

The Department's teaching and research are shaped to a large extent by its position within LSE, a world-leading social sciences institution engaging with the whole world. Within this environment we view teaching and research as complementary activities, each enhancing the other, and we want to be excellent in both. On top of that, we want to offer a supportive and friendly environment in which everybody can fulfil their potential. Throughout the year we organise activities aimed at making sure you get to know your fellow students and other members of the LSE community. We really hope you will engage with those activities, and tell us if there are others you would like to see organised.

The last 30 months we have been living and working in a world dominated by Covid-19. At the time of writing (June 2022) we are hopeful this coming year will be much more "normal" again. In particular, most teaching and support activities will be back on campus again. But we've also realised that sometimes an online meeting can be just as useful as an in-person one, and often a lot more convenient. We've learned (and are still learning!) new ways of working.

In this handbook you will find a wealth of information about your degree programme, your studies, the support the Department and LSE offer, and much more. **Our website** provides further and up-to-date information, including news and events, and a section for current students in the Department.

Finally, if at any point during your time with us you feel that there is something I should be aware of regarding your experience in the Department of Mathematics or at LSE (good or bad), do not hesitate to contact me, by email, in person, or on Zoom. My door is always open, whether it's a virtual door, or the door of my office.



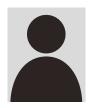
Professor Jan van den Heuvel Head of Department J.van-den-Heuvel@lse.ac.uk

Key Staff



Dr Katerina Papadaki is the Programme Director for this degree. After your individual Academic Mentor, she is your main contact for academic queries.

Email: k.p.papadaki@lse.ac.uk



Rebecca Batey is the MSc Programmes Manager for all MSc programmes in the Department. She is your main contact for any administrative queries.

Email: R.Batey@lse.ac.uk



Dr Marie Oldfield is the Senior Lecturer in Practice and is the course convenor for the MA425: Project in Operations Research & Analytics. She will be joining us in early September.



Professor Jan van den Heuvel is the Head of the Department. He is responsible for all academic activities, students, staff and programmes offered by the Department.

Email: j.van-den-heuvel@lse.ac.uk

Other Professional Services Staff you may need to know are:

Kate Barker – Department Manager

Jasna Begić - Teaching Support Officer

Sarah Massey - Communications and Student Experience Officer (leaves mid-October)

Joe Faulkner – Communications, EDI and Student Experience Officer (starts early September)

Please check the departmental website for a full list of academic staff, their research interests, office hours and contact details:

lse.ac.uk/Mathematics/people

lse.ac.uk/Mathematics/internal/Office-Hours.aspx

Name	Email	
Dr Ahmad Abdi	a.abdi1@lse.ac.uk	
Professor Peter Allen	p.d.allen@lse.ac.uk	
Professor Martin Anthony ***	m.anthony@lse.ac.uk	
Dr Galit Ashkenazi-Golan	g.ashkenazi-golan@lse.ac.uk	
Dr Tuğkan Batu	t.batu@lse.ac.uk	
Professor Julia Böttcher	j.boettcher@lse.ac.uk	
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Professor Giacomo Zambelli	g.zambelli@lse.ac.uk	
Professor Mihail Zervos	m.zervos@lse.ac.uk	

* unavailable for MT 2022/23 ** unavailable for LT 2022/23 *** unavailable for all 2022/23

About the Department

The LSE Department of Mathematics is internationally recognised for its teaching and research. Located within a world-class social science institution, the Department aims to be a leading centre for mathematics in the social sciences. The Department's growth trajectory reflects the increasing impact that mathematical theory and mathematical techniques are having on subjects such as economics and finance, and on many other areas of the social sciences. The Department offers seven degree programmes across various levels: undergraduate; postgraduate; and MPhil/PhD.

Department Office

The Department's main office can be found on the 4th floor of Columbia House in **COL.4.01**. The team is available to assist with general enquiries as well as student support, submission of coursework and other non-academic queries. You can also find members of Professional Services Staff in COL.3.03.

During a normal term time, the office would be open from **10am – 12 noon** and **2-4pm**.

Postal address:

Department of Mathematics, COL.4.01 The London School of Economics and Political Science Houghton Street London WC2A 2AE

Email: maths.info@lse.ac.uk

Email

The School will use your LSE email address to communicate with you so you should check it regularly. You can access this off campus using **Webmail**. If on campus, the email program Microsoft Outlook is available on all student PCs on the LSE network.

Social Media, Blog and Student Hub

You can follow the Department of Mathematics' Twitter account here: @LSEMaths.

- You can also follow our LinkedIn page and connect with our alumni community and watch videos on our YouTube channel. The Department runs a research blog here: blogs.lse.ac.uk/maths
- We are also on the **Student Hub** app! Our main departmental page can be found here: **studenthub.lse.ac.uk/channel/56**





Research Interests of Staff

Dr Ahmad Abdi

Polyhedral combinatorics, packing and covering, ideal clutters, integer programming, matroid theory, graph theory.

Professor Peter Allen

Extremal combinatorics, especially graphs and uniform hypergraphs, asymptotic enumeration, Ramsey theory, random discrete structures.

Professor Martin Anthony

Mathematical aspects of the theory of machine learning and Boolean functions.

Dr Galit Ashkenazi-Golan

Dynamic games, repeated games, stochastic games, games with incomplete information, games with imperfect monitoring and games with Borel measurable payoffs.

Dr Tuğkan Batu

Algorithms and theory of computation, randomised computation, sublinear algorithms, property testing, and streaming algorithms.

Professor Julia Böttcher

Extremal combinatorics, random discrete structures, pseudo-randomness, Ramsey theory, regularity method, packing.

Professor Graham Brightwell

Combinatorics, especially partially ordered sets and random combinatorial structures. Markov chains and discrete stochastic processes.

Dr Christoph Czichowsky

Financial mathematics, stochastic analysis, transaction costs, market frictions.

Dr Albina Danilova

Asymmetric information, derivative pricing, stochastic calculus, insider trading, stochastic control, equilibrium theory.

Dr Pavel Gapeev

Optimal stopping and stochastic control, applications in finance and statistics, stochastic analysis, stochastic games, credit risk theory.

Professor Olivier Gossner

Game theory, economics of information, decision theory, repeated games, bounded rationality and complexity.

Professor Jan van den Heuvel

Discrete mathematics in general, especially graphs, networks and matroids, applications and algorithmic aspects.

Dr Grammateia Kotsialou

Algorithmic game theory, economic mechanism design, game theory, congestion games, algorithms, complexity, auctions.

Professor Andrew Lewis-Pye

Logic, computability, algorithmic randomness, network science, complex systems, cryptocurrencies.

Dr Arne Lokka

Pricing and hedging of derivatives, optimal execution, optimal portfolio theory, equilibrium modelling, stochastic optimal control.

Dr Neil Olver

Algorithms, with an emphasis on optimization in networks, as well as links to game theory (especially traffic) and probability.

Professor Adam Ostaszewski

Mathematical finance, in particular real options and accounting theory, including corporate disclosure policy. Bargaining theory.

Dr Katerina Papadaki

Optimisation algorithms for wireless network problems, drone routing problems, patrolling games for network security, approximate dynamic programming algorithms.

Dr Emilio Pierro

Finite group theory, groups of Lie type, generation of finite simple groups, geometric group theory and combinatorics.

Professor Johannes Ruf

The modelling of dynamic systems that arise in finance and economics.

Professor Amol Sasane

Applicable analysis, in particular algebraic analytical questions for topological rings, systems of partial differential equations, and applications in theoretical physics.

Dr Robert Simon

Ergodic Theory, Banach-Tarski Paradox, Game, Theory, Algebraic Topology, Principal-Agent Problems, Chaos Theory.

Professor Jozef Skokan

Combinatorics, graph theory, discrete geometry, extremal set theory.

Professor Gregory Sorkin

Random graphs, discrete random structures, combinatorial optimisation, phase transitions, probability. Applications in engineering, OR, other areas.

Professor Bernhard von Stengel

Game theory, equilibrium computation, algorithms, linear inequalities, discrete mathematics.

Professor Konrad Swanepoel

Combinatorial and discrete geometry, convex geometry and the geometry of normed spaces, shortest geometric networks.

Professor László Végh

Algorithms and optimization, algorithms for problems related to network design, and equilibrium computation, particularly on strongly polynomial computability.

Professor Luitgard Veraart

Financial mathematics, statistics in finance, risk management, systemic risk, networks, financial regulation.

Dr Aled Williams

Integer optimisation, knapsack problems, discrete mathematics, geometry of numbers, diophantine equations, operations research.

Professor Giacomo Zambelli

Combinatorial optimisation, integer programming, mathematical programming, operations research.

Professor Mihail Zervos

Mathematical finance and economics, stochastic control and optimisation, stochastic analysis.

Studying and Academic Support

Your Academic Mentor

At the start of term all students will be assigned an Academic Mentor. Your Academic Mentor will:

- Provide you with academic guidance and feedback on your progress and performance.
- Discuss any academic problems you may be experiencing.
- Provide pastoral support on non-academic issues and refer you, as necessary, to sources of support within the School.
- Meet with you regularly and maintain regular contact with you outside of meetings.
- Likely be one of the people that will write reference letters for you in future, so it is important that they get to know you well.

During your first few weeks, you must contact your Mentor to discuss and agree your choice of courses. After this initial meeting, you should arrange other meetings with your Mentor at least once or twice in each term. They will contact you to set up these meetings, unless you wish to discuss something more urgently.

Mentors will be able to discuss with and advise you on a range of academic and pastoral issues. These can include: academic progress; course choices; deferral; exams; and personal circumstances. Academic Mentors are also one of the first faculty points of contact if you are facing difficulties with your studies. Academic Mentors will treat all information you give them with the appropriate level of confidentiality, although sometimes it may be necessary for your Mentor to discuss information with other relevant members of staff. To find out more about the Academic Mentor role, see **here**.

Note that your Academic Mentor is not responsible for assisting you with administrative problems. If something is wrong with your registration, timetable, etc., you should contact the **Student Services Centre** or **Rebecca Batey**.

Programme Director

The Programme Director for the MSc in Operations Research & Analytics for this year is **Dr Katerina Papadaki**.

The Programme Director is in overall charge of the tutorial system for your degree, and is also responsible for monitoring the progress of students. They approve outside options, as well as any special arrangement requests.

In most cases you should consult your Academic Mentor before seeing the Programme Director. If you have difficulties communicating with your Academic Mentor, you can contact the Programme Director to discuss the situation further. In exceptional circumstances, where you feel the Programme Director is unable to help, you are welcome to instead consult the Head of Department.

Equity, Diversity and Inclusion

The School's commitment to equity, diversity and inclusion is one of its strategic priorities and one of the core principles set out in the School's Ethics Code. Find out more about our Equality Officer in the Department of Mathematics here: Ise.ac.uk/Mathematics/EDI

Lectures and Seminars

Mathematics courses taught by the Department are taught by means of lectures and seminars/classes. For each course there are usually two lectures per week during the two main teaching terms (most half-unit courses run for one term/11 weeks of teaching). For each course, you will also be assigned to a seminar once a week, which normally start in week two of the term and attendance is compulsory. Teaching arrangements on courses run by other departments may be different, so check the **course guide** for more information.

Postgraduate Study Room

During a normal term, you will have access to the Department of Mathematics study room for MSc students. This room is **COL.2.12** (on the 2nd floor of Columbia House) and is available 7am – 12 midnight on weekdays, and 8am – 10pm on weekends. You will need your ID card for access to the building and to the room.

Graduation Ceremonies

The Graduation Ceremony for MSc Operations Research & Analytics students takes place in December, with the ceremony held on campus in the Peacock Theatre. The Student Services Centre emails invitations, which include details of the ticket booking process, are emailed to students 5-6 months before the ceremonies are scheduled to take place. The ceremony itself usually lasts 60-80 minutes and is immediately followed by an on-campus drinks reception with the Department.

For more information, including the dates of future ceremonies and details of the School's overseas ceremonies, please see: **lse.ac.uk/ceremonies**



Programme Structure

Paper	Course	Course Title	
1	MA423	Fundamentals of Operations Research (0.5)	
2	MA424	Modelling in Operations Research (0.5)	
3	ST447	Data Analysis & Statistical Methods (0.5)	
4 & 5	Two of the following:		
	MA402* or MA434*	Mathematical Game Theory (0.5) or Algorithmic Game Theory (0.5)	
	MA407** or MA421**	Algorithms & Computation (0.5) or Advanced Algorithms (0.5)	
	MA427	Mathematical Optimisation (0.5)	
	MA428	Combinatorial Optimisation (0.5)	
	MA429	Algorithmic Techniques for Data Mining (0.5)	
6	One of the following:		
	MA433	Mathematics of Networks (0.5)	
	MG409*	Auctions & Game Theory (0.5)	
	MG455	Decisions, Biases & Nudges (0.5)	
	ST422	Time Series (0.5)	
	ST455	Reinforcement Learning (0.5)	
	ST456	Deep Learning (0.5)	
	-	Another course from those listed under Paper 4	
	-	Any other MSc-level courses, with approval of the Programme Director and the Course Convenor	
7	One of the following:		
	MA425	Project in Operations Research & Analytics (1.0)	
	MA426	Dissertation in Operations Research & Analytics (1.0)	

Notes:

A student may be exempted from a course specified in Paper 1, 2, or 3, at the discretion of the Programme Director and upon supplying satisfactory evidence to the course convenor of previous study of the course's content. A student shall replace such a course with another module, chosen subject to approval of the Programme Director.

* Students may choose at most one of the following optional courses as part of this programme: MA402, MA434 and MG409.

** Students may take at most one of MA407 and MA421 under Paper 4/5 but may take the other under Paper 6.

Timetable Outline

The table below indicates which term(s) relevant courses will fall under during this academic year. Details about provisional timetables can be found on the School's website **lse.ac.uk/current-students/timetables**

Michaelmas Term	Lent Term
Pap	ers 1-3
MA423: Fundamentals of Operations Research	
MA424: Modelling in Operations Research	
ST447: Data Analysis & Statistical Methods	
Pap	ers 4-5
MA402: Mathematical Game Theory	MA421: Advanced Algorithms
MA407: Algorithms & Computation	MA427: Mathematical Optimisation
	MA428: Combinatorial Optimisation
	MA429: Algorithmic Techniques for Data Mining
	MA434: Algorithmic Game Theory
Pa	per 6
MA433: Mathematics of Networks	MG409: Auctions & Game Theory
ST442: Time Series	MG455: Decisions, Biases & Nudges
	ST455: Reinforcement Learning
	ST456: Deep Learning
Pa	per 7
MA425: Project in Opera	ations Research & Analytics
MA426: Dissertation in Op	erations Research & Analytics

MA425: Project in Operations Research & Analytics

This full-unit course is essentially a consultancy engagement. Each student is assigned a real-world project with an industry, government, or non-profit partner institution, working on it (with a supervisor's support) throughout June, July, and August.

MA426: Dissertation in Operations Research & Analytics

This full-unit course is to explore in depth a topic chosen by the student on their own or from a list provided. A supervisor's agreement must be obtained first. Work may be started as early as January but is done primarily over June, July, and August.

Course Selection and Timetables

When to select your courses

Course selection will open for browsing on Monday 19 September at 10am and will be open for course selection on Thursday 22 September at 10am. Course slections need to be made by Friday 7 October at 5pm. You will be able to make changes to Lent Term half-unit courses early in Lent Term. For more information, please check the **course selection webpages**. Note that courses you have taken in Michaelmas Term cannot be dropped in Lent Term.

How to select your courses

Visit **Finding Courses** to access the tools and information to help you decide which courses you want to take this academic year. The LSE Course Finder tool can help you choose which courses to take within your programme regulations, and is usually available from late August. Course Finder allows you to browse available courses by unit value, keyword, department and assessment type. You may also wish to look at course content on Moodle and check the teaching timetable to detect potential clashes. Some departments have controlled access or capped courses which means that places are limited. Make sure that you identify a few back-up courses in case your first choices are not available.

The LSE calendar is the place to check for programme regulations, detailing which courses you are permitted to take. You will need to select your courses on LSE For You once the system opens. Guidance on how to do this can be found on here. Providing your selected courses are ready in Moodle, you should be automatically enrolled on their Moodle pages a few hours after selecting your courses on LSE For You. You must select compulsory courses for your programme in addition to your optional ones.

Should you have questions about a particular course the most efficient strategy is to put them to the Course Convenor. If you have any queries about the programme itself or need advice on the course selection process you can contact the MSc Programmes Manager, Rebecca Batey, on **r.batey@lse.ac.uk**

Lent Term Course Selection

Course selection will re-open at the start of Lent Term. You are able to change your Lent Term courses during the first two weeks of Lent Term provided the newly chosen half unit courses are not oversubscribed. Late course changes are not permitted in Lent Term once course selection has closed. We strongly advise that you do not change more than one half unit course during this period.

Seminar sign up

Where a course is taught in more than one seminar group or in larger lecture groups, students are also required to enrol in seminar groups for the course. This is done through the **Seminar Sign Up facility** on **LSE For You**.

Auditing courses

Some LSE courses allow students to 'audit'. This is an informal arrangement where you can join the lectures but do not take the assessments. These courses do not appear in your course selections or timetable and will not appear on your transcript. Some students choose to audit courses to expand their knowledge in other areas. If you would like to audit a course you should first check that your timetable will allow you to join the lectures. If so, contact the relevant Course Convener and ask permission to audit their course.

Getting help

For queries about the course selection process, you can contact the Student Services Centre (SSC) via **their enquiry form**. The SSC can help if you are experiencing issues with the **LSE For You** system. If you are not able to access **LSE For You**, you can contact **Tech Support**.

If you have a question about Moodle, please contact eden.digital@lse.ac.uk

For advice around which courses to take and how your programme fits together please contact your Academic Mentor or **Rebecca Batey**.

Assessment

This section is about the various forms of assessment you might encounter during your studies.

- Formative assessment takes place on all courses, but **does not count** towards your final results. In mathematics courses, this will usually take the form of exercises.
- **Summative assessment** can take several different formats, and **does count** towards your final results. Most MSc courses are primarily assessed by an unseen written exam in the Summer Term, or a project or a piece of coursework. A half unit course (0.5) is usually assessed by a two-hour exam and a full unit course (1.0) by a three-hour exam.
- Please note in order to be considered for a degree, a student **must have attempted and completed** <u>**all**</u> **components of summative assessment** as outlined in the Taught Masters regulations.

Exams

Most of the courses you will take as part of your degree will be in mathematics. Other Departments have their own traditions and arrangements for assessment, and students are directed to the appropriate Departments to find more about these.

Mathematics courses at LSE are assessed primarily by written, unseen, closed-book exams, although some courses include assessed projects or coursework. The Department of Mathematics has general guidelines on assessment criteria, which provides broad descriptions of the meaning of marks awarded on our exams. You can read the MSc Operations Research and Analytics regulations **here**.

Also informative is the national **QAA Subject Benchmark Statement for Mathematics**, **Statistics and Operational Research**. Whilst primarily aimed at undergraduate courses, much of what they say will also apply at graduate level.

Most exams take place during the summer term (May/June). There is also a January exam period which takes place just before the start of LT. You can check this information via the MSc Course Guides. The exam timetables are published ahead of the exam periods, either late Michaelmas or Lent Term.

To help you prepare effectively for your exams you should make yourself fully aware of the format and syllabus to be covered in the exam. Past papers can be accessed via the Library web pages (access restricted to LSE network only).

Marking Criteria

There are specific assessment criteria for dissertations and larger pieces of assessed coursework. Smaller pieces of assessed coursework are likely to resemble homework exercises in style and nature. One purpose of the marking and grading of these earlier in the course is to inform students about what is expected from them in assessed coursework, as well as exams.

Coursework will be assessed on accuracy and understanding of the material. It is LSE Policy that students should be given some feedback on assessed coursework. This will often form 'collective feedback', ie, indications of common errors and parts of questions that were answered particularly well or badly. The exact format of such feedback is at the discretion of the course convenor.

Assessed Coursework

In some courses, you will be set one or more pieces of coursework, a project or assignments as part of the summative assessment of that course. The lecturer responsible for the course will tell you the nature of any assessed coursework at the beginning of the course. They will also mention roughly when the coursework will be set, and the due date for coursework submission.

Assessed coursework is marked according to the same procedures as the summative exams in Summer Term. It usually involves a second Examiner as well as the Department's External Examiner and the marking of coursework is done anonymously.

Do not write your name or Student ID Number (eg, 202012345) on any piece of assessed coursework you are submitting – only your **5 digit Examination Candidate Number** (eg, 12345) which can be found on LFY. The Departmental Office will have a record of candidate numbers and names to ensure that a proper record is kept of the submission of coursework.

Please note, students who do not submit their summative coursework will be considered not to have completed the degree as set out in the **General Academic Regulations**.

Penalties for Late Submission of Coursework

The School has a clear and strict policy on the late submission of any assessed coursework that counts towards your final degree marks. This information is laid out in the **General Academic Regulations for Taught Masters Degrees**. More information on assessment and plagiarism can be found in the Key Information pages later in the handbook.

If a student fails to submit by the set deadline (or extended deadline appropriate) the following penalty will apply: **5 marks out of 100 will be deducted for coursework submitted within 24-hours of the deadline and a further 5 marks will be deducted for each subsequent 24-hour period (working days only) until the coursework is submitted**.

Revise and Submit Policy

In the event a student fails a summative component and it is retaken, they will be required to revise and resubmit that work, or required to submit alternative work on which they will be assessed, depending on what is most appropriate.

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Assessment Criteria

The Department has the following general guidelines on assessment criteria, which provide broad descriptions of the meaning of marks awarded on our exams.

Mark (%)	Grade Descriptor	Characteristics	
1-9	Bad Fail	 Nothing presented or completely incorrect information or answers contain nothing at all of relevance 	
		 No evidence of understanding 	
		• No competence in core basic techniques of the subject.	
10-19 Bad Fail		 Very little information or information that is almost entirely incorrect or irrelevant 	
		 Very little evidence of understanding 	
		 Very little competence in core basic techniques of the subject. 	
20-29	Fail	Little evidence of understanding	
		 Very limited competence in core basic techniques of the subject. 	
30-39	Fail	 Some understanding evident, but no ability to grapple with anything other than a limited range of very routine questions 	
		 Limited competence in core basic techniques of the subject or competence only in a small part of the material. 	
40-49	Fail	 A demonstration of a basic understanding of and competence in the subject 	
		 Some knowledge of, and application of, relevant methods and techniques 	
		 A basic range of information and knowledge deployed, with some areas of inaccuracy. 	

Mark (%)	Grade Descriptor	Characteristics
50-59	Pass	 A sound understanding of the subject
		 Knowledge of, and some application of, relevant methods and techniques
		• A stand, and largely accurate, range of information and knowledge deployed
		 May demonstrate ability to grapple with standard problems, but limited capacity to solve more unusual or demanding questions involving application of significant understanding of the subject.
60-69	Merit	A clear understanding of the subject
		Competent application of relevant methods and techniques
		 Wide and accurate range of information and knowledge deployed
		• Some capacity to solve more unusual or demanding questions involving application of significant understanding of the subject.
70-79	Distinction	 A thorough understanding of the subject
		 Deft application of relevant methods and techniques
		• Extensive range and consistent accuracy of information and knowledge
		• A significant capacity to solve more unusual or demanding questions, involving application of thorough understanding of the subject and its methods.
80-89	Distinction	 A deep understanding of the subject
		 Mastery of relevant methods and techniques
		 Highly extensive range and consistent accuracy of information and knowledge
		 An impressive ability to solve more unusual or demanding questions involving application of deep understanding of the subject and its methods.
90-100	Distinction	• A comprehensive and deep understanding of the subject
		 Mastery of relevant methods and techniques and an ability to deploy them with flair
		 Very extensive range and consistent accuracy of information and knowledge
		• An outstanding ability to solve unusual and demanding questions involving application of deep and comprehensive understanding of the subject and its methods.

Feedback

Lecturers, class teachers and academic mentors hold regular office hours and are on hand to answer queries throughout the term and provide feedback. They also provide specific written feedback on LSE for You (LFY). Submitting all your homework for marking is also an excellent way of ensuring you get regular feedback.

Key information

What is feedback?

- It is part of learning, providing your with ideas and information about how to make improvements
- It is a dialogue between you and all those other people you come across in your learning, who help you develop and understand ideas.
- It is a joint responsibility: you need to be an active player, not a passive recipient!

How can feedback help you?

- It helps you improve the particular assignment you are working on.
- It gives you useful pointers for subsequent work.
- It helps you understand the criteria that will be used to assess you in exams and coursework, where the grade counts towards your degree result.
- It is an opportunity to reflect and plan what actions you need to make next.
- It motivates you to reach your potential.

How is feedback provided?

You will get feedback on all sorts of work:

- Problem sets
- Mock exams, 'exam type' assignments and tests
- Your contributions to class discussions
- Your participation in Moodle discussion fora
- Questions you raise in lectures or online
- Class presentations
- Course essays
- Group projects
- Your work overall throughout the term.

Feedback comes in many different forms:

- Written comments on work you've handed in
- Direct oral feedback from your class teacher
- Group feedback from your lecturer
- Information feedback from discussion with fellow students and teachers
- Online feedback (Moodle, email, LFY, etc).

Feedback comes from a variety of sources

- Your class teachers and lecturers
- Your Academic Mentor
- Fellow students on your courses/programme
- Fellow students in your hall/housing/neighbourhood.



Useful Links

The following links contain information that you will find particularly useful, as well as being course-specific:

MSc Operations Research & Analytics Programme Regulations:

Ise.ac.uk/resources/calendar/programmeRegulations/taughtMasters/2022/ MScOperationsResearch&Analytics.htm

Local Rules for the MSc Operations Research & Analytics Programme:

Ise.ac.uk/resources/calendar/LocalRules/MA/MA-OperationsResearchAnalytics.htm

Department of Mathematics Website:

lse.ac.uk/Mathematics

Moodle page for MSc Mathematics Students

moodle.lse.ac.uk/course/view.php?id=2417

Support and FAQ's

Ise.ac.uk/Mathematics/Current-Students/Support-and-FAQs

Personal and Professional Development

There are many ways in which LSE supports the personal development and wellbeing of students both on and off campus.

In terms of events, there are lectures and group-based workshops across the year on topics such as stress management, overcoming perfectionism and coping with personal difficulties. You can find more information on the links below:

info.lse.ac.uk/current-students/student-wellbeing

info.lse.ac.uk/current-students/lse-life

info.lse.ac.uk/staff/divisions/Academic-Mentoring-Portal/Information-for-Students

Women in Mathematics Seminar Series

The Department of Mathematics recognises that women historically have been and still are an under-represented group in Mathematics. To learn and discuss why this is the case and what can be done about it, we regularly organise Women in Mathematics Seminars. For these seminars we invite speakers to talk about their background, experiences, and sometimes research, related to the position of women studying or working in mathematics. All members of the Department (students and staff), whatever their gender, are encouraged to attend these seminars. Announcements are made via email and on **our website**.

Academic Awards and Prizes

The Department of Mathematics likes to celebrate the achievements of its students, both academic achievements and community focused. The following prizes are available to be won by MSc Operations Research and Analytics students during their time at LSE.

Ailsa Land Prize

This prize is named for Ailsa Land (1927-2021), a Professor of Operational Research at LSE known for her pioneering work in the branch-and-bound method for discrete optimisation. The prize is awarded annually for the best overall performance by a student on the MSc Operations Research & Analytics, and consists of a monetary award and a book.

More information can be found on the prize here: Ise.ac.uk/Mathematics/Current-Students/Prizes/Ailsa-Land-Prize

John Ying Wah Gibson Prize Fund

The fund is named in memory of John Ying Wah Gibson, a BSc Mathematics and Economics graduate from 2009, who passed away whilst running the Singapore Marathon in December 2016. John is remembered as a dedicated student who made excellent contributions to his cohort, in particular in offering support to his fellow students. The fund compromises two awards, the **John Ying Wah Gibson Citizenship Prize** and the **John Ying Wah Gibson Voluntary Work Award**, which students can apply for or nominate other students for. These prizes are open to all Mathematics student taking undergraduate and postgraduate programmes.

More information can be found here: Ise.ac.uk/Mathematics/Current-Students/Prizes/John-Ying-Wah-Gibson-Prize



Jargon Buster

Michaelmas Term

Otherwise known as Autumn Term, first semester or Fall Term, this is the first part of the academic year starting in September and finishing in December. You may see it written like this, or as 'MT' on some of your course documents.

Lent Term

Lent Term is also known as Spring Term or second semester and falls after the Christmas Break and the New Year. This usually lasts until the Easter Break, and after it is Summer Term. You may see it written as 'LT' on some of your course documents.

The School

This may seem obvious, but if someone says "the School" this is referring to LSE as a whole institution. They may also call it the university or just say LSE. All other names will refer to departments or divisions, which all form part of the wider School.

Director

Some other higher education institutions have Chancellors, Vice Chancellors or Presidents. Our equivalent here at LSE is a Director. Our Director is Baroness Minouche Shafik (2017-present) who was previously an MSc student at LSE.

Programmes and Courses

At LSE, the term "programme" refers to your degree (e.g. MSc Financial Mathematics), whereas "courses" refer to the modules you take (e.g. MA417: Computational Methods in Finance).

Capped and Controlled Courses

Many graduate courses are designated as 'controlled access' due to limited places and/or prerequisites that are required in order to study the course. Find out more **here**.

The Calendar

This is a resource used by everyone for regulations relating to a programme, course and other aspects of their study. You would find the 'Course Guide' for a course, or your regulations for your programme here: **Ise.ac.uk/resources/calendar**

Useful Information

Location of Departments

Language	20 Kingsway – Ground Floor	020 7955 6713	languages@lse.ac.uk
Mathematics	Columbia House – 4th Floor	020 7655 7732	Maths.Info@lse.ac.uk
Management	Marshall Building – 4th Floor	020 7106 1203	dom.reception@lse.ac.uk
Statistics	Columbia House – 6 th Floor	020 7107 5416	statistics@lse.ac.uk

Important Contacts

Accommodation Office	accommodation@lse.ac.uk
Careers Office	careers@lse.ac.uk
Crime Reporting/Campus Security	020 7955 6200
Fees Office	020 7955 7765
Financial Support Office	financial-support@lse.ac.uk
IT Information and Help Desk	020 7107 5000 / tech.support@lse.ac.uk
Library Enquiries	library.enquiries@lse.ac.uk
London Nightline (6pm - 8am)	020 7631 0101
LSE LIFE	lselife@lse.ac.uk
LSESU Advice Centre	su.advice@lse.ac.uk
Student Wellbeing Service	020 7955 7567 / 020 7852 3627
Student Services Centre	lseportal.force.com/studentservices/s/
	enquiry-form
St Philips Medical Centre	020 7611 5131

See also: ise.ac.uk/People/Search-People

Key Information

Term Dates and LSE Closures – Academic Year 2022/23 🛐

Student Services Centre N

Student Voice N

Student Partnership 🔰

Quality Assurance N

Study and Career Support Services 🔰

Equity, Diversity and Inclusion (EDI) 🛐

Your Wellbeing and Health 🔰

Exams and Assessments 🔰

Assessment Misconduct and Plagiarism 🔰

Results and Classification 🔰

Fees and Finance **N**

Codes and Charters N

Systems and Online Resources 🔰

LSE Campus 🔰

At LSE, you don't just get to study our changing world, you can see it and experience it. With history being made every day, why would you want to be anywhere else?

Term Dates and LSE Closures Academic Year 2022/23

Michaelmas Term (MT)

Monday 26 September – Friday 9 December 2022

Lent Term (LT) Monday 16 January – Friday 31 March 2023

January Exams: Monday 9 – Friday 13 January 2023

Summer Term (ST)

Tuesday 2 May – Friday 16 June 2023

Summer Exams: Monday 8 May - Friday 16 June 2023

LSE will be closed during the following periods:

Christmas Closure

Thursday 22 December 2022 – Monday 2 January 2023

Easter Closure Thursday 6 – Wednesday 12 April 2023

May Bank Holiday: Monday 1 May 2023

Spring Bank Holiday: Monday 29 May 2023

Summer Bank Holiday: Monday 28 August 2023



Student Services Centre

The Student Services Centre (SSC) is located on the ground floor of the Old Building. Advice and information is available on services including:

- Support for new arrivals
- Student status documentation
- Course selection
- Immigration advice
- LSE ID cards
- TfL 18+ Student Oyster Photocards
- Exams and assessment
- Results and degree certificates
- Graduation.

We are also a good point of contact to find out more about the support services available at LSE and we host specialist drop-in sessions. Visit **Ise.ac.uk/ssc** for the latest information about our services, opening times and drop-in sessions.

Online Pre-Enrolment and Campus Enrolment

The majority of new students will be required to undertake a two-stage process: Online Pre-Enrolment and Campus Enrolment. You will receive email notification when it is time to complete the pre-enrolment process for your programme. Campus enrolment takes place in-person and is where we will check your official documents and you will be issued with your LSE Card. It is very important that you attend Campus Enrolment. Usually, you can re-enrol for subsequent years of study online, but sometimes we may need to see you in person again.

For more information, visit **lse.ac.uk/enrolment**

Student status documentation

During your time at LSE you may need official documentation to prove that you are studying with us. A Certificate of Enrolment provides proof to organisations such as council tax offices, embassies and banks that you are enrolled as a current studentat LSE. For more information about what a Certificate of Enrolment shows visit **Ise.ac.uk/studentletters**

You can order a self-service Certificate of Enrolment which will be delivered immediately to your LSE email address in PDF format. If this is insufficient for your needs, you can request a customised Certificate of Enrolment to be produced by the Student Services Centre. **We will do our best to provide the information required, but this cannot be guaranteed**. Please bear in mind that during peak periods customised letters may take up to five days to produce. For more information about both types of Certificates of Enrolment and how to order, please visit **Ise.ac.uk/studentletters**

The Student services Centre (SSC) also offers a range of other documents including Certificates of Course Selection and intermediate transcripts. For more information about the types of documents available, how to request letters, and to access our Enquiry Form, please visit **Ise.ac.uk/studentletters**

Your LSE Card

Your LSE card provides access to buildings and acts as your library card. It is important that you keep it safe and never share it with anybody else. If your LSE card is lost, stolen or damaged visit **Ise.ac.uk/studentidcards** to find out how to get a replacement.

Student Advice

The SSC has a dedicated Student Advice and Engagement Team that can provide advice on academic matters (particularly around non-progression, interruption, withdrawal, regulations and exams).

If you are not sure who to contact about a query or question, then the Advice and Engagement Team will be happy to help. You can contact the team via the enquiry form at **Ise.ac.uk/studentadvice** Your LSE card is an important piece of identification so please make sure you keep it safe, and never share it with anybody else. 99

Immigration Advice

The Advice and Engagement Team provide detailed immigration advice for international and EU/EEA students on their website which is updated whenever the immigration rules change. The best way to contact the team is to use the visa advice query form or to attend one of their drop-in sessions.

What if...

The SSC have developed a series of answers to common "What if..." questions. These cover a broad range of topics including what to do if you're unwell during an exam; become pregnant; change your name; are not happy with your marks or want to change degree programme. You can find these questions and answers at **info.lse.ac.uk/current-students/what-if**

> We are the only team trained and regulated to give immigration advice at LSE, under the Office of the Immigration Services Commissioner guidelines.

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Interruption

In certain circumstances you can take a year-long break in your studies (which we call an interruption) with approval from your academic department and the School. You are usually required to return at the start of either Michaelmas Term or Lent Term the following year as appropriate. Summer Term interruptions are not possible. For more information visit **lse.ac.uk/interruptions**

Programme transfer

You can request to transfer from your current programme to another programme at the same level according to the School's regulations. There are usually restrictions or conditions on transferring programmes, and sometimes transfers are not possible. All transfer requests require the approval of the new academic department you wish to transfer into, and the School, before being authorised. For more information visit **Ise.ac.uk/programmetransfers**

Withdrawal

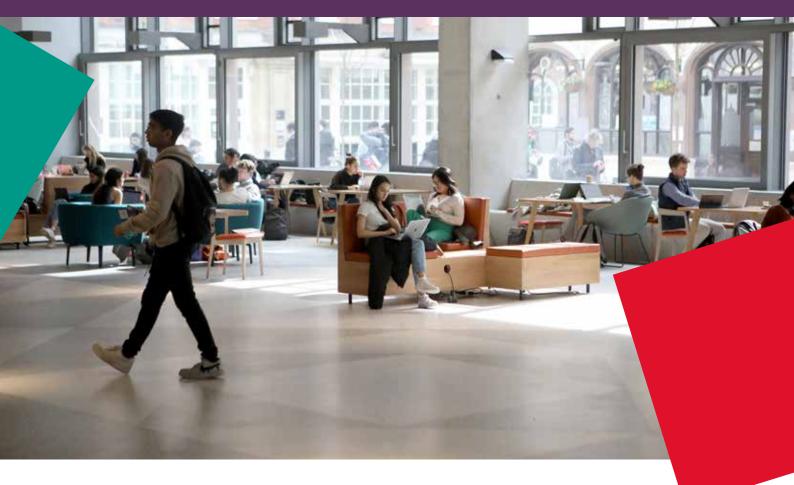
Withdrawing means that you are leaving your programme permanently.

Before withdrawing you should consult with your Academic Mentor, and you may want to consider requesting an Interruption instead, so that you have some time to consider your options. For more information visit **Ise.ac.uk/withdrawal**





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Regulations

You should familiarise yourself with the LSE regulations, policies and procedures that cover many aspects of student life. Some of the regulations explain the organisation and conduct of your academic study. These include information about the structure of your programme, assessment requirements, how your final degree is calculated and what to do if you face exceptional circumstances.

Visit Ise.ac.uk/calendar for more information on:

- Appeals Regulations
- General Academic Regulations
- LSE Calendar
- Assessment offences including plagiarism
- Regulations for first degrees
- Regulations for taught master's degrees.

You can find a full A-Z listing of all of LSE's policies and procedures online at **Ise.ac.uk/policies**

Student Voice

Student-Staff Liaison Committees

Student-Staff Liaison Committees (SSLCs) are one of the most important bodies in the School. Their purpose is to create a forum for students to discuss their experiences, both in and outside of the classroom, with LSE staff. SSLCs are a shared, collaborative endeavour between Departments, the Students' Union, central School Services, and, most importantly, students themselves.

SSLCs are your chance to engage with LSE and enact change for the benefit of yourself, your cohort, and even future cohorts. Volunteer to represent your peers and take a leading role in the student body.

At the start of the year you will be asked by your department if you would like to represent your programme on the SSLC as a Student Academic Representative.



Hear from current students about their experience of getting involved in SSLCs and the Peer Support scheme.

More information, including access to minutes from SSLCs across the School, and other ways you can use your voice, can be found online at **info.lse.ac.uk/current-students/ part-of-lse/student-voice**





Student Q&As with LSE Leadership

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LSE Director Minouche Shafik hosts student Q&As with members of the School Management Committee, where you can discuss your experience as a student with LSE leadership.

The Q&As are an opportunity for students from across the School to hear from the Director in person and give you the chance to ask questions, raise suggestions and voice any concerns. Look out for details of where and when the Q&As will be happening.

Student Partnership

Change Makers

Change Makers is an opportunity for you to instigate positive changes at LSE through independent research.

You are invited to propose a research project (independently, as a pair or as a group) about an aspect of student experience at LSE. This can be on a topic you identify, or one that's been proposed by staff.

Approximately 25 proposals will be selected to receive 80 hours of funding, full academic supervision, and the opportunity to present your findings and recommendations directly to LSE leaders.

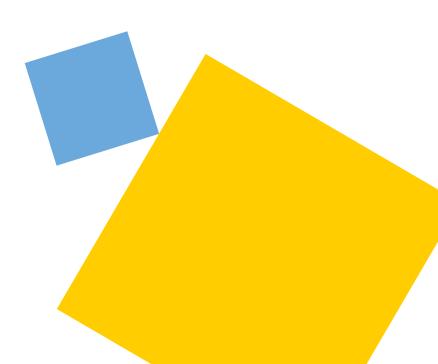
Applications to become a Change Maker will open in Michaelmas Term 2022 and you can find out more at **lse.ac.uk/changemakers**

Student Education Panel

The Student Education Panel is an opportunity for you to enhance education at LSE and gain insight into how the university works.

50 Student Education Panellists meet twice per term to consider a specific educationrelated topic, question or proposal. Drawing on their own experiences and ideas, they work in partnership with LSE and LSESU to co-create a better educational experience for everyone. In recognition of their contributions, and to enable a wide range of students to participate, panellists receive a termly honorarium.

Applications to become a panellist will open in Michaelmas Term 2022 and you can find out more at **lse.ac.uk/studenteducationpanel**



Quality Assurance

Quality assurance strategy

LSE's approach to assuring the quality of our teaching is set out in the Strategy for Managing Academic Standards and Quality. As an awarding body LSE must be in a position to assure the standards of its degrees. At the same time, we believe that the design of quality assurance should respect different departmental cultures and academic histories. The strategy sets out broad principles and processes for assuring academic standards and for enhancing the quality of educational provision. The overall framework includes devolved quality assurance arrangements for academic departments, with responsibility for the oversight and modification of existing provision resting with Departmental Teaching Committees. The Teaching Quality Assurance and Review Office (TQARO) supports the activities of the Education Committee and several of its sub-committees, with further details available in the "Committees" section of the website at **Ise.ac.uk/tqaro**. Queries relating to devolved quality assurance responsibilities, the work of Education Committee or the process for the consideration of proposals for new courses and programmes of study should be sent to **ard.capis@lse.ac.uk**

Student teaching surveys

In both Michaelmas Term and Lent Term TQARO conducts course-level surveys to assess students' opinions of teaching.

Course survey scores are made available to teachers, Heads of Departments, the Director of the Eden Centre, the Pro-Director (Education) and the Pro-Director (Faculty Development). In addition to producing reports for individual teachers TQARO produces aggregated quantitative data for departments and School-wide bodies. The results can be found online in the "Surveys" section of the website at Ise.ac.uk/tqaro

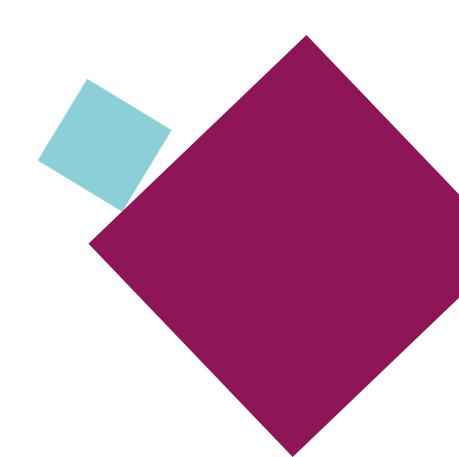
TQARO also conducts annual programme-level surveys of undergraduate and taught master's programmes and supports LSE's participation in the National Student Survey in coordination with the Communications Division and academic departments. Queries relating to the delivery of teaching surveys at course- or programme-level should be sent to **tqarosurveys@lse.ac.uk**

Study and Career Support Services

LSE LIFE

LSE LIFE is the place to discover and develop the skills you'll need to reach your goals at LSE, whether they concern your academic work or other personal or professional pursuits. LSE LIFE is here to help you find your own ways to study and learn, think about where your studies might lead you, and make the most of your time at LSE. It is also the place to come to ask about the range of opportunities and services available across the School to help you achieve success, whatever 'success' means to you. LSE LIFE offers:

- Hands-on practical workshops and online resources for effective reading, academic writing, critical thinking, managing your dissertation research, organising your time, and other key areas of university work.
- Constructive conversations and workshops to learn ways to adapt and thrive in new or challenging situations, including developing your skills for leadership; public speaking; connecting and collaborating with others; finding a healthy balance among study, work, rest, and fun; and thinking about life beyond university.
- One-to-one appointments with LSE LIFE study advisers for personalised advice on essays, participating in classes and seminars, revising for exams, or any other aspect of your studies at LSE. Or simply book an appointment - on campus or online - to talk through your ideas for an essay, a project, or your research.



- **Specialist advice** in areas like CV writing, English language, finding and referencing academic sources, research ethics and data management, statistics, and more offered on a one-to-one basis by colleagues and services across LSE.
- A space to meet and work together with students from other courses and departments.
- Group visits and walks to take advantage of what LSE and London have to offer.

Find out more at **Ise.ac.uk/Iselife**, check out workshop materials and other resources on Moodle or just drop by with any questions, or just to pick up a lollipop – LSE LIFE is on the ground floor of the Library, open Monday-Friday, 10 am - 6 pm.



LSE Careers 🔰

LSE Volunteer Centre 🔰

LSE Generate 🔰



LSE Library

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LSE Library is the major international library of the social sciences. The collections, both print and online, cover the discipline in the widest sense, and will support your studies and research.

The two main print book collections are:

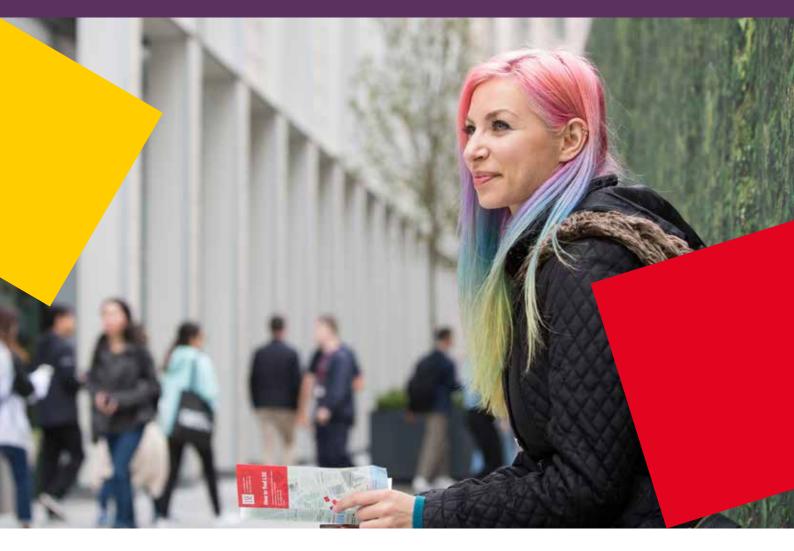
- **The course collection**, located on the first floor, which holds multiple copies of essential books for your courses. Many of these titles are available online.
- **The main collection** is located across three floors, holding wider items for social sciences research.

You can use Library Search to find books and other materials for your studies via **Ise.ac.uk/library**. Once you have found what you need, write down its location to help you find it in the Library. To borrow books, use your LSE card and the self-service machines on the ground floor. Taught students can borrow up to 30 books at any one time. You can renew your books online by logging into your Library account at **Ise.ac.uk/library**. If you do not return books on time, you will be unable to borrow any more until your overdue item is returned or renewed. We do not charge fines on late returns.

Each department has a dedicated professional Librarian, a subject expert offering email support and in-person and online appointments to help you locate and access information resources on any topic. This support ranges from identifying key resources to support your studies to high-level systematic literature searching for researchers. They also provide expert help in managing references.

The Library is a focal point of the School and we are open seven days a week during term time and vacation and 24 hours daily from the beginning of the Lent term until the end of the examination period. There are over 2,300 study spaces, including group study rooms, and extensive IT facilities, including over 500 PCs, laptop points, a laptop loan service, wireless Internet access via eduroam, and photocopying and printing facilities.





Language Centre

Whether you are an international student looking for support with your English, interested in taking a Language Centre course as part of your undergraduate degree, or want to learn or improve a language, the Language Centre can help.

If English is not your first language, there are plenty of ways you can improve and practise using the English language for your academic work. English for Academic Writing courses are available for any undergraduate or postgraduate student who does not have English as a first language and would like a weekly English language class to help with academic writing for coursework. You can find out more information on what is on offer and how to sign up at info.lse.ac.uk/current-students/lse-life/events/english-language-skills

You may be eligible to take a language, literature or linguistics course as part of your degree. As an LSE student you can also sign up for a non-degree language course at a discounted rate. As part of the LSE Language Policy, if you are a UK-EU undergraduate and you do not have a GCSE Grade 4 (or equivalent) in a language that is not your mother tongue, you are eligible to take a course for free!

For more information visit **Ise.ac.uk/languages**

LSE Careers

From helping you to find part-time work and internships, to providing opportunities for you to explore different sectors and connect with employers and alumni, LSE Careers is here to support you throughout your LSE journey.

How do I get started?

Whether you're just beginning to explore your career options or have a clear idea of where you want to go, we're here to work with you. We offer a range of support and services to current students and once you've completed your course you can continue to use LSE Careers for up to five years. We also provide bespoke services for disabled students and PhD students.

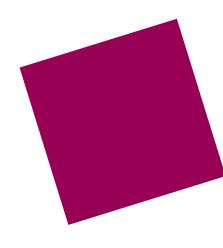
Explore our website (Ise.ac.uk/careers) to find:

- information about our services and how to access them
- support with career options and insight into employment sectors and recruitment processes
- cv, cover letter and application form advice and examples
- details of what graduates have gone on to do.

Log in to CareerHub (careers.lse.ac.uk), our online careers portal, to:

- book one-to-one appointments with a consultant
- register for careers events
- watch back event recordings
- browse job opportunities.

Follow @LSECareers on Instagram and TikTok to stay up-to-date with upcoming events, expert advice and new resources.



LSE Volunteer Centre

Volunteering is a great way to help develop new skills and meet new people whilst making a difference. The LSE Volunteer Centre is here to inspire and empower you to volunteer for causes that you are passionate about during your time at LSE.

We work with multiple organisations to provide you with short term and long-term volunteering opportunities across London, the UK and internationally. Throughout the year charities will be on campus to discuss their volunteering opportunities with you at our volunteering fairs and Charity Tuesdays.

We also know that students are busy, so we run a comprehensive one-off volunteering programme to make sure you can fit it in. You can find out more, as well as the advice and support we can offer, at **Ise.ac.uk/VolunteerCentre** or by following **@LSEVolunteering**



Read our blog

LARGEST

The feeling of fighting for a cause that you are passionate about it second to none, but the skills you gain from it are unparalleled.

Dan Lawes, International Relations and History, 2022

Key information

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LSE Generate

LSE Generate is the student home of entrepreneurship at LSE.

We welcome all students and alumni - from those starting their journey in developing entrepreneurial skills to those who have already launched their ventures and are looking for support. We specifically focus on supporting and scaling socially driven student ventures and have a presence here in the UK and across the globe (from Lisbon to Lagos!).

As a student, you'll have access to all of our startup resources as well as access to a variety of events created to expand your skills, give you the tools to excel, and help you network with like-minded founders. Our events vary from funding competitions, talks, workshops on a range of topics, bootcamps, and even treks!

Pop by and meet us in our co-working space opposite the Student Services Centre on campus.

Discover more on our website lse.ac.uk/generate or keep up to date with Generate news through our social media **@LSEGenerate**

There are so many ways to get involved at LSE, try to make the most of these chances.

Equity, Diversity and Inclusion (EDI)

What is EDI?

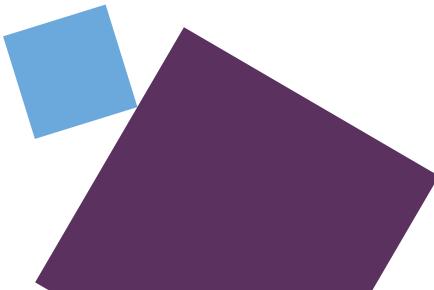
One of our guiding principles in Strategy 2030 is to sustain excellence through an inclusive and diverse community. We work to build a School – and a society – in which everyone is able to fulfil their potential, and everyone's contribution is valued.

Support and resources available:

Safe Contacts: LSE Safe Contacts are members of LSE staff who have received training and can offer a confidential "signposting" service for staff and students who have previously or are currently subjected to some form of bullying, harassment (including those based on protected characteristics under the Equality Act 2010: age, disability, gender reassignment, marriage and civil partnership pregnancy and maternity, race, religion or belief, sex and sexual orientation), hate crimes or sexual violence. There are 39 Safe Contacts across 25 departments. Safe Contacts are often the first point of contact if you are unsure of what to do. They provide support to you and help you navigate what comes next. Find out more at **Ise.ac.uk/safecontacts**

Report it Stop it: If you have been subjected to, or witnessed, any form of bullying, harassment (including those based on protected characteristics under the Equality Act 2010: age, disability, gender reassignment, marriage and civil partnership pregnancy and maternity, race, religion or belief, sex and sexual orientation), hate crimes or sexual violence and you want to report this to LSE, you can directly do it by using the online form Report it Stop it. This report can be completely anonymous. If you leave your contact details, the School's Deputy Head of Student Services will be able to get in touch to help with the next step. Find out more at info.lse.ac.uk/making-a-choice/report-an-incident

Ethics Module: This online module has been designed for the whole School community with the aim of increasing understanding of the Ethics Code, the range of ethics policies that support the ethics principles, how they can be applied, and the importance of creating a culture in which individuals can and do raise any concerns that they may have.



Consent Collective: This online platform provides resources to help people understand consent, learn about sexual harassment and find out how to support people who have been subjected to sexual violence. This resource will only be available until August 2022. After this consent training can be accessed via Consent.ed There is both an online and in person module.

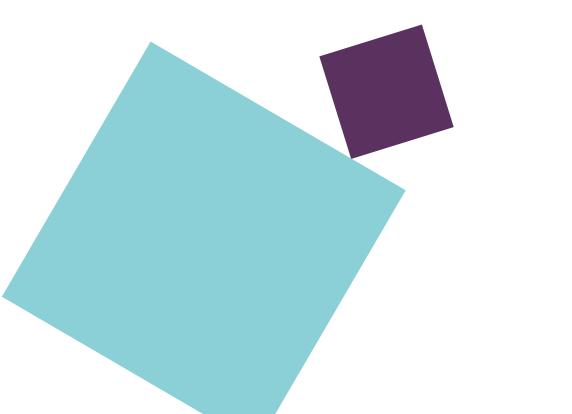
AccessAble: Our partnership with AccessAble will help us to be proactive in improving the accessibility of our buildings, at a time when the LSE estate is undergoing major physical change.

LGBT+ Role Models and Allies Directory: Being an LGBT+ role model at LSE is about being a visible member of the LGBT+ community and a champion for LGBT+ issues.

Rape Crisis: Rape Crisis Centres provide frontline specialist, independent and confidential services for women and girls of all ages who've been subjected to any form of sexual violence, at any time in their lives. LSE has partnered with Rape Crisis so that any student or staff member can book appointments with a designated Sexual Violence Support Worker anytime. Find out more: info.lse.ac.uk/Making-a-choice/Sexual-violence-support-worker

Survivors UK: LSE has recently partnered with Survivors UK and they can provide independent sexual violence advisor services to any man, boy, transgender or nonbinary person in the LSE community. Any staff or student can book a 45 minute confidential appointment by emailing **isva@survivorsuk.org**

If you would like to find out more about these and the information and support available to you, please contact the EDI Team at **edi@lse.ac.uk**, or visit **lse.ac.uk/ equitydiversityinclusion** where you can also find out more about our initiatives including the Race Equity Framework.



Your Wellbeing and Health

Student Wellbeing Service (SWS)

SWS brings together two specialist student facing services; the Disability and Wellbeing Service (DWS) and the Student Counselling Service (SCS), supported by the Wellbeing Team. SWS also facilitates the Peer Supporter Scheme. SWS aims to provide you with a single integrated source of help and assistance. Visit our webpage (tbc) to access support.

Student Counselling Service (SCS)

SCS provides a professional, free and confidential service to help you with any personal problems that you may be experiencing. You can speak to a qualified and experienced counsellor about academic stresses, as well as personal and emotional difficulties. Visit **Ise.ac.uk/counselling** to book a Wellbeing appointment to discuss whether counselling is the best option for you, and to explore further options available to you.

SCS also organises groups and workshops to support students experiencing stress, anxiety or other issues. Details of these groups can be found here at info.lse.ac.uk/ current-students/student-wellbeing/counselling-workshops

Disability and Wellbeing Service (DWS)

DWS are the first point of contact for students with disabilities, long term medical and mental health conditions, and Specific Learning Difficulties such as dyslexia. DWS can help you to create My Adjustments which is a way of putting in place agreed "reasonable adjustments" to support your studies. Visit **lse.ac.uk/disability** to find out more.

Peer Supporters

Peer Supporters give you the opportunity to talk to fellow students about anything that is worrying you. Peer Supporters are trained to offer confidential emotional support, help and reassurance. You can find out more about the scheme and arrange a chat with a Peer Supporter at **Ise.ac.uk/peersupport**

My Adjustments

If you have a disability, long-term medical or mental health condition you are advised to apply for My Adjustments (MA) as soon possible. The earlier that you let the Disability and Wellbeing Service (DWS) know about your condition, the earlier they can work with you to put appropriate support in place. Advisers in DWS can potentially set up one-toone learning support, mentoring and help you access assistive technology designed to remove barriers to studying. For more detailed information about My Adjustments, and to apply for My Adjustments, visit **Ise.ac.uk/myadjustments**

Health care in the UK

You are likely to need to access medical care while you are at LSE, even if this is just for routine appointments. In the UK most health care is provided through the National Health Service (NHS).

You are typically eligible for free treatment on the NHS if you fall into one of the following categories:

- You are a UK resident
- You have a Student visa and have paid the immigration health surcharge
- You have applied for the EU Settlement Scheme and hold either Pre-settled or Settled status.

This list is not exhaustive and was correct at the time of print. The UK Council for International Student Affairs maintains an up-to-date listing on their website available at **ukcisa.org.uk**

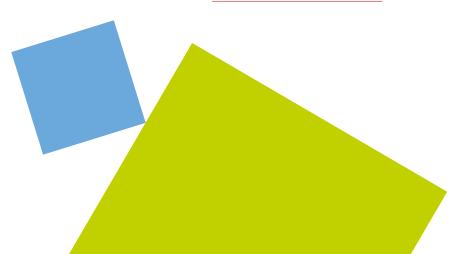
If you are unfamiliar with the NHS search for "NHS Services explained" to find out more. You are usually required to register with a local General Practitioner's (GP) surgery before you can book an appointment. You should register as soon as possible and not wait until you are unwell. The nearest GP surgery is St Philips Medical Centre who are based on the second floor of Pethick-Lawrence House. This surgery will register most LSE students. For more information about the services offered and how to register please visit **www.stphilipsmedicalcentre.co.uk** or call **020 7611 5131**.

Alternatively, you can find your nearest GP by using the GP finder function on the NHS website available at **nhs.uk**

As well as dispensing medicines, pharmacies can also offer advice on common health problems. You do not need to make an appointment, just visit a pharmacy and ask

to speak to the duty pharmacists. In an emergency you should dial **999** to call an ambulance. You can also visit your nearest accident and emergency (A&E) department at your local hospital or visit an Urgent Care Centre.

There is a lot more information about Health Care, including details about dentists and opticians, available at **Ise.ac.uk/studenthealth**



LSE Faith Centre

The Faith Centre is open to students of all faiths and none. It is home to LSE's diverse religious activities, transformational interfaith leadership programmes, and a space for worship, prayer and quiet reflection.

Finding your feet

It can be challenging arriving in a new city for a new start. We want to help you settle into London and find a community that suits you – and there are lots of options! We provide a space for student faith societies to meet, worship and plan their activities. Details of contact information for faith groups can be found in our Religion and Belief Guide. Pick up a copy from the Faith Centre Reception on the second floor of SAW or check out **Ise.ac.uk/faithcentre**

Wellbeing

We host a range of activities including Mindfulness, Yoga, Ashtanga Yoga and Tai Chi. Class details can be found on the "Wellbeing" page at **Ise.ac.uk/faithcentre**. You can also come to the Faith Centre for personal prayer and reflection.



Facilities

The Faith Centre comprises Islamic Prayer Rooms, a space for silent prayer/meditation (The Cave) and a multifaith space (The Desert Room) which is bookable for SU Faith Societies or faith/wellbeing-based staff groups. Email **faithcentre@lse.ac.uk** for booking enquiries.

Support

You can contact the Faith Centre Director and Chaplain to LSE, Revd Dr James Walters, on **j.walters2@lse.ac.uk** for confidential support regardless of your religion or belief.

You can also find contact details for our team of Associate Chaplains on our "People" page at **Ise.ac.uk/faithcentre**

Interfaith Leadership Programmes

Learn more about our interfaith leadership programmes on the "Programmes" pages at **Ise.ac.uk/faithcentre**. They are your chance to explore, question and challenge religious differences, and provide unique opportunities to build relationships and transform attitudes across faiths.

LSE Religion and Global Society Blog

The LSE Religion and Global Society blog is an interdisciplinary platform that seeks to explore the place and role of religion in our globalised world. The blog functions as a platform for experienced and early career academics, PhD and Masters research students, and other expert commentators to share their insights on this complex, wide-reaching topic. The blog welcomes contributions from academics from around the world whose work touches on religion.

If you are interested in writing a blog article, please contact Austin Tiffany at **a.r.tiffany@lse.ac.uk**

Religion Scholars Network

The LSE Faith Centre, through its Religion and Global Society Research Unit, convenes a network for current LSE PhD candidates across departments whose research relates to the social scientific study of religion. This is a great opportunity to collaborate with other PhD candidates from different fields through informal events throughout the year to share your insights and challenges. For more information email Austin Tiffany at **a.r.tiffany@lse.ac.uk**

Exams and Assessments

Candidate numbers

Your candidate number is a unique five-digit number that ensures that your work is marked anonymously. It is different to your student number and will change every year. Candidate numbers can be accessed in early Michaelmas Term using LSE for You. Further information about LSE for You can be found in the Systems and Online Resources section.

Systems and Online Resources section 🔰

Exam timetables

Course by course exam timetables will be available **online**. For January exams the timetable is usually available towards the end of Michaelmas term, for summer exams it is usually available towards the end of Lent Term and for students taking in-year resit and deferral exams, it is usually available in late July. Closer to each exam season, you will also be given access to a personal exam timetable with your room and seat numbers.

Exam procedures 🔰

Central exam adjustments 🔰

Deferral 🔰

Extension policy 🔰

Exceptional circumstances 🔰

Fit to sit policy N

Exam procedures

Anybody taking exams at LSE must read the Exam Procedures for Candidates. It contains all the information that you need to know and is updated each year. The document is less than ten pages and covers topics ranging from candidate numbers to permitted materials to what to do if things go wrong. You can download your copy at **lse.ac.uk/exams**

You may only use a calculator in an exam if this is permitted by the relevant academic department. If you are permitted a calculator, it must be one of the approved models. For more information on the types of calculators allowed, please read the Exam Procedures for Candidates. If you bring an alternative model it will be removed by invigilators and no replacement will be given. The permitted calculators are readily available in many supermarkets, online retailers and in the LSE Shop.

Central exam adjustments

Central Exam Adjustments (CEAs) can be made if you have a documented medical, physical or mental health condition and/or a specific learning difficulty such as dyslexia or dyspraxia. The purpose of CEAs is to provide an environment that gives all students an equal opportunity in exams. These adjustments are confidential and will not be listed on your degree certificate or transcript. In most cases you should apply for CEAs as part of getting your My Adjustments in place. However, there is a different process for applying for CEAs for short-term, unexpected, conditions. For more information visit **Ise.ac.uk/CEA**

Deferral

If you have difficulties in the lead up to, or during, the assessment or exam then you can seek to defer the assessment or exam. You will need to complete a Deferral Form and submit the completed form to your degree programme's Chair of the Sub Board of Examiners for approval. For more information visit Ise.ac.uk/deferral

Extension policy

If you have difficulties in the lead up to an assessment deadline but think you may be able to successfully submit if you had extra time, you can seek an extension request. You must make this request before the deadline has taken place and you will need permission from the Chair of the Sub-Board of Examiners of the Department that the corresponding module belongs to by completing an Extension Request form. For more information and the extension form visit **Ise.ac.uk/extensionpolicy**

Exceptional Circumstances

You should submit an Exceptional Circumstances Form and corroborating evidence to the Student Services Centre if there are any circumstances which may have affected your performance. These could include (but are not limited to):

- missing an assessment which you did not defer, or submitting an assessment late and incurring penalties
- experiencing difficulties which could have affected your academic performance in an exam or coursework
- adjustments such as CEAs, My Adjustments or deadline extensions being insufficient to compensate for the impact of your circumstances
- a late diagnosis of a condition meaning that you could not apply for adjustments until after you had completed some or all assessments.

Submitting an EC Form is the only way for you to alert the Sub-Board of Examiners to the circumstances which may have affected your performance. For more information visit **Ise.ac.uk/exceptionalcircumstances**

Fit to sit policy

By attempting any type of assessment, including but not limited to sitting exams, submitting coursework, class participation, presentations or dissertations, you are declaring yourself fit to sit. If you have experienced disruption to your studies (including but not limited to illness, injury or personal difficulties) you must think carefully about whether you should attempt the assessment or whether you should consider requesting an extension or deferring the assessment. Requests for an extension or deferral must be made in advance of the assessment deadline.



Assessment Misconduct and Plagiarism

If you are found to have committed an assessment offence, such as plagiarism or exam misconduct, you could be expelled from the School.

The work you submit for assessment must be your own and all source material must be correctly referenced. Plagiarism is not only submitting work with the intention to cheat. Plagiarism could occur simply as a result of failing to correctly reference the sources you have used.

Any quotation from the published or unpublished works of other persons, including other candidates or your own previous work, must be clearly identified as such.

Quotes must be placed inside quotation marks and a full reference to sources must be provided in proper form. A series of short quotations for several different sources, if not clearly identified as such, constitutes plagiarism just as much as a single unacknowledged long quotation from a single source. All paraphrased material must also be clearly and properly acknowledged.

Any written work you produce (for classes, seminars, exams, dissertations, essays and computer programmes) must solely be your own. You must not employ a "ghost writer" to write parts or all the work, whether in draft or as a final version, on your behalf.

For further information and the School's statement on Editorial Help visit **lse.ac.uk/ calendar**. Any breach of the Statement will be treated in the same way as plagiarism.

You should also be aware that a piece of work may only be submitted for assessment once (either to LSE or elsewhere). Submitting the same piece of work twice (regardless of which institution you submit it to) will be regarded as the offence of "self-plagiarism" and will also be treated in the same way as plagiarism.

Examiners are vigilant for cases of plagiarism and the School uses plagiarism detection software to identify plagiarised text. Work containing (or that contains) plagiarism may be referred to the Regulations on Assessment Offences: Plagiarism, which may result in the application of severe penalties.

If you are unsure about the academic referencing conventions used by the School you should seek guidance from your department, Academic Mentor, LSE LIFE or the Library as soon as possible.

The Regulations on Assessment Offences: Plagiarism can be found at **Ise.ac.uk/calendar**

Results and Classification

Results

Final and provisional results are released through LSE for You. Final results are available once the relevant School Board of Examiners has ratified them. Provisional results are available for students taking January exams and for 12 month master's students.

Results are not released to students that have debts owing to the School. For more information on how and when results are released visit **lse.ac.uk/results**

If you need to take a deferred or resit assessment, more information about the resit period can be found at info.lse.ac.uk/current-students/services/assessment-and-results/exams/re-entry

Classification schemes 🔰

Transcripts 🔰

Degree certificate 🔰







Classification schemes

Degrees are awarded according to the classification scheme. These schemes are applied by the Boards of Examiners when they meet to ratify your results. You can find the classification schemes at **lse.ac.uk/calendar**

Transcripts

Continuing students can request intermediate transcripts through the Student Services Centre here immediately after ratified results have been published. Final transcripts are made available electronically through Digitary which allows them to be easily shared. For more information about final transcripts please visit **Ise.ac.uk/transcripts**

Degree certificate

Your degree certificate will be posted to you. For more information please visit **Ise.ac.uk/degreecertificates**

Fees and Finance

Fees

All administration around your fees is handled by the Fees, Income and Credit Control Team.

LSE offers two options for payment of your tuition fees. You can either pay them in full prior to enrolment or by payment plan. If you have not paid your fees in full before you enrol you will be placed on a termly payment plan. You are expected to pay one third of your fees by:

28 October 2022

28 January 2023 28 April 2023

For payment plan options relating to Executive programmes please see **Instalment** options Executive Programmes.

For tuition fee levels please visit **lse.ac.uk/tableoffees**

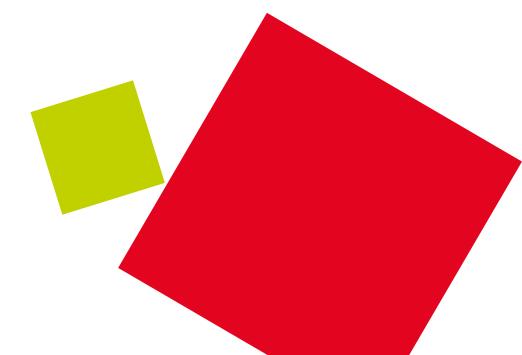
To pay online or to find out about the different payment methods available, visit **Ise.ac.uk/feepayments**

Once you are enrolled you can access your financial details at any time to review your tuition and accommodation fees, invoices, payments and instalment arrangements by accessing the Finance Hub. Please visit our webpage to get full details **lse.ac.uk/ficc**

Unfortunately, it is not possible for you to pay in person.

The Fees, Income and Credit Control Office also run drop-in sessions for students who wish to discuss fees and payment related enquiries. For further information, please visit **lse.ac.uk/ficc**

For full details regarding tuition fees, charging policy, payment and instalment options, visit **lse.ac.uk/feespolicy**



Financial Support Office (FSO)

The Financial Support Office is responsible for administering a variety of scholarships, bursaries and funds for enrolled students. Please contact us if you have any questions about your LSE funding.

If you experience financial difficulties, contact us as soon as possible to discuss your options. Home fee status undergraduate students can apply to the LSE Access Fund for additional funds to top-up the Student Finance loans.

Attend one of our Zoom Drop-in Sessions: **Ise.ac.uk/financialdropin**, call or email for further advice and information.

Contact us: Financial Support Office +44 (0)20 7955 6609 financial-support@lse.ac.uk | lse.ac.uk/financialsupport

Codes and Charters

LSE Academic Code

LSE's Academic Code sets out what we are doing to deliver a consistent student experience across our School, and clarifies what you can expect from an LSE education.

The Academic Code brings together key principles that underpin students' education into a School-wide policy. Developed in partnership with LSE Students' Union, it sets the baseline to build on in four key areas: teaching standards, academic support, assessment and feedback and student voice – areas that students have told us matter the most to them.

Read the Academic Code in full.

The Academic Code should be read in conjunction with the LSE-LSESU Student Charter.

The Student Charter

Our Student Charter, written by students and staff, sets out how LSE's mission and ethos are reflected in the education you can expect to receive at the School, and in the diverse, equitable and inclusive community that we all contribute to and value.

The charter covers:

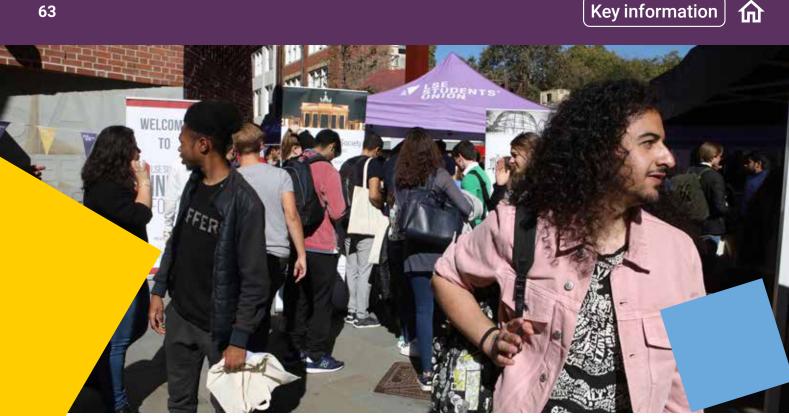
- Your education what an LSE education is and how you can make the most of it
- **Our community** what it means to be part of the LSE community and how to contribute
- Your future, our future how to inspire future generations of LSE students.

Find out more about the charter and **read the full version** online.

Codes of Good Practice

The Codes of Good Practice explain the responsibilities and requirements of both staff and students.

They set out what you can expect from your department in relation to your teaching and learning experience. The codes cover areas like the roles and responsibilities of Academic Mentors and Departmental Tutors, the structure of teaching at LSE and exams and assessment. The codes also lay out your responsibilities as a member of our community. You can find the codes of practice in the **LSE calendar**.



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The Ethics Code

The Ethics Code details the principles by which the whole LSE community are expected to act.

We expect the highest possible ethical standards from all staff, students and governors. The Ethics Code sets out the School's commitment to the six ethics principles:

- Responsibility and Accountability
- Integrity
- Intellectual Freedom
- Equality of Respect and Opportunity
- Collegiality
- Sustainability.

Learn more about the Ethics Code.

Research Ethics

If you conduct research, you'll need to follow the Research Ethics policy and procedures.

Search online for "LSE Research Ethics and Guidance" to find resources, training and support. If you have any questions regarding research ethics or research conduct, please email research.ethics@lse.ac.uk

Systems and Online Resources

Need IT help?

- Visit the Technology Centre on the first floor of the Library
- Email: tech.support@lse.ac.uk
- Call: 020 7107 5000

The Tech Centre is open seven days a week during term time and offers a range of services including a laptop surgery. For further information visit **info.lse.ac.uk/current-students/dts**

LSE for You

LSE for You is a web portal which gives you access to a range of services. You can access LSE for You at **lse.ac.uk/lseforyou**

LSE for You allows you to:

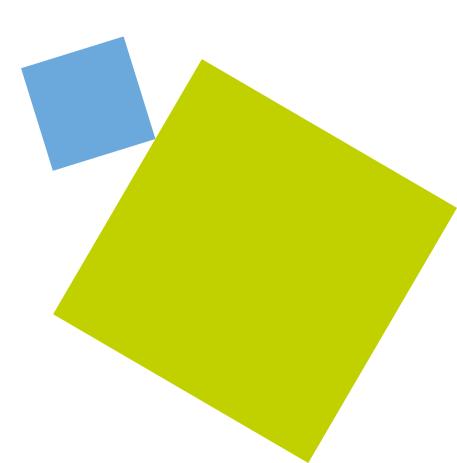
- · View and update your term time (contact) and home (permanent) address
- Access your candidate number
- View your final results and award
- Select your courses.

Student Hub 🔰

Moodle Ŋ

Reset your IT password 🔰

Email 🔰



Student Hub

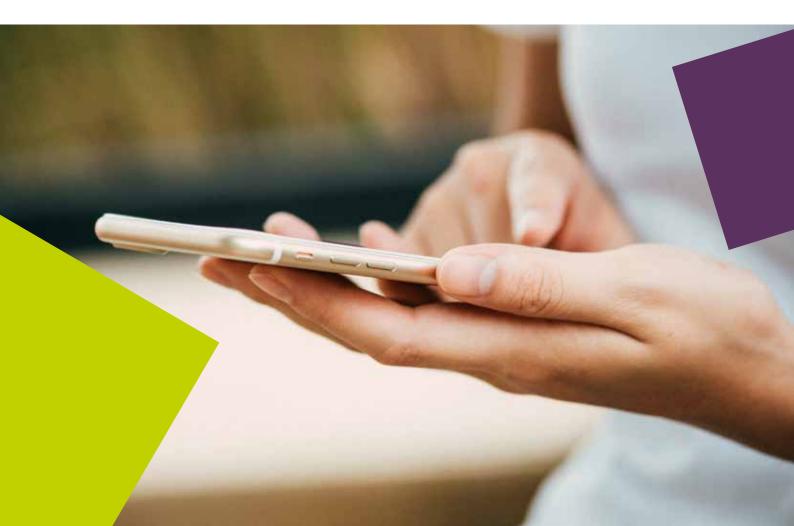
The Student Hub is LSE's app, designed to help you navigate your day-to-day life at LSE. With the Student Hub, you can:

- View your timetable and upcoming deadlines
- Find your way around with the campus map
- Follow your department, LSE events, Careers the Students' Union and more to keep up to date with news and events from around LSE
- Book appointments with academic staff (office hours) or support services
- Create or join groups with friends and course mates to carry on the conversation outside of class.

Download the app to help you organise your time, connect with coursemates and discover everything that LSE has to offer.



Available on iOS and Android app stores or as a web app. Visit **studenthub.lse.ac.uk** to find out more!



Moodle

Moodle is LSE's virtual learning environment.

The majority of taught courses have a corresponding course on Moodle, the online learning platform used at LSE. Moodle courses contain essential resources such as lecture slides, lecture recordings and reading lists. Moodle also enables activities such as quizzes and discussion forums and allows for online assignment submission, marking and feedback. How Moodle is used is determined by the course convenor and so this may vary from course to course. LSE also provides a Moodle Archive service which provides teachers and students with a snapshot of previous year's courses.

You can access Moodle by visiting moodle.lse.ac.uk

Reset your IT password

You can reset your IT password at LSE Remote Access.

Email

LSE will use your LSE email address to communicate with you so check it regularly.

Microsoft Outlook is available on all public PCs. You can also access your email offcampus using webmail (**mail.lse.ac.uk**) or on the move using clients for laptops and mobile phones. For help setting up email on your device search "LSE mobile email setup".

Training and Development System 🔰

Information security awareness training 🔰

Multi-Factor Authentication (MFA) 🛐





Training and Development System

The Training and Development System allows you to book a place on many of the personal development opportunities offered around LSE.

You can access the Training and Development System at **apps.lse.ac.uk/trainingsystem** and login using your LSE username and password.

Information security awareness training

The LSE Cyber Security Awareness Training can be self-enrolled at Course: LSE Cyber Security Awareness Training. We strongly advise you to complete the training which equips you with the skills to spot phishing emails, keep your data and devices safe, and protect your privacy.

More tips are available at **lse.ac.uk/cyber**

Multi-Factor Authentication (MFA)

LSE has implemented mandatory MFA on all IT accounts. To active this extra layer of security protection for your account and data, please set up Multi-Factor Authentication (MFA) via **lse.ac.uk/mfa**



LSE Campus



All buildings have wheelchair access and lifts, except, KGS, KSW*, 5LF, POR* and SHF. *KSW 20 Kingsway (Language Centre only), *POR 1 Portsmouth Street (Shop only).

Disabled Access

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After 6.30pm, please call Security Control on **020 7955 6200** to ensure that any disabled access doors are open. Also see: <u>Accessibility map [PDF]</u> For access to 20 Kingsway, please call security staff on **020 7955 6200** to set up the portable ramp in the entrance foyer.

Access Guides to LSE buildings

AccessAble have produced detailed access guides to the LSE campus and residences, and route maps between key locations. These access guides, and route maps, are now **available online**.

lse.ac.uk/Mathematics



Department of Mathematics

The London School of Economics and Political Science Houghton Street London WC2A 2AE

E: maths.info@lse.ac.uk

T: +44 (0)20 7955 7732

This information can be made available in alternative formats, on request. Please contact maths.info@lse.ac.uk

The London School of Economics and Political Science is a School of the University of London. It is a charity and is incorporated in England as a company limited by guarantee under the Companies Acts (Reg no 70527).

The School seeks to ensure that people are treated equitably, regardless of age, disability, race, nationality, ethnic or national origin, gender, religion, sexual orientation or personal circumstances.

Design: LSE Design Unit (info.lse.ac.uk/staff/divisions/ communications-division/design-unit) Photography: Cover image Chris Liverani, Unsplash (unsplash.com). Internal photography: Nigel Stead, LSE School Photographer and Maria Moore. **Please note:** a number of photographs in this document were taken before UK social-distancing guidance was in place. LSE takes every step to ensure the safety of all students and staff.