

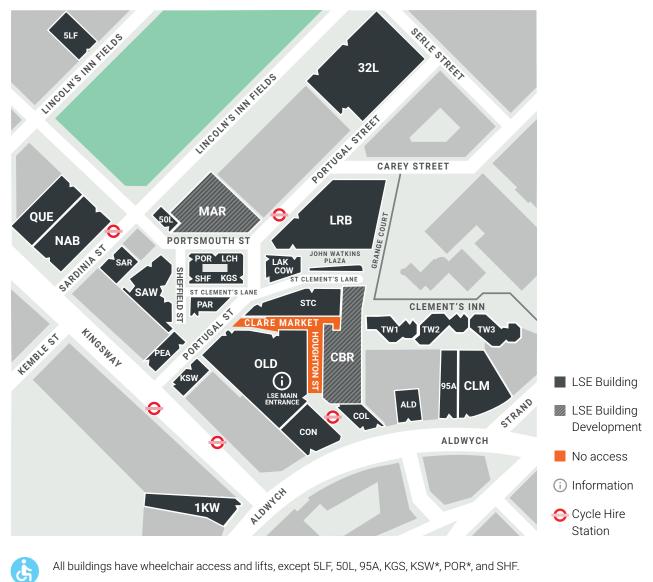
Department of **Statistics**

MSc Data Science



Student Handbook 2017/18

LSE campus



All buildings have wheelchair access and lifts, except 5LF, 50L, 95A, KGS, KSW*, POR*, and SHF. *KSW 20 Kingsway (Language Centre only) *POR 1 Portsmouth Street (Shop only)

95A	95 Aldwych		
ALD	Aldwych House		
CBR	Centre Building Redevelopment		
CLM	Clement House		
COL	Columbia House		
CON	Connaught House		
COW	Cowdray House		
KGS	King's Chambers		
1KW	1 Kingsway		
KSW	20 Kingsway		
LAK	Lakatos Building		

LCH	Lincoln Chambers
5LF	5 Lincoln's Inn Fields
32L	32 Lincoln's Inn Fields
50L	50 Lincoln's Inn Fields
LRB	Lionel Robbins Building, Library and The Womens Library
MAR	The Marshall Building (44 Lincoln's Inn Fields)
NAB	New Academic Building
OLD	Old Building
PAR	Parish Hall

Peacock Theatre		
1 Portsmouth Street		
Queens House		
Sardinia House		
Saw Swee Hock Student		
Centre		
Sheffield Street		
St Clement's		
Tower One		
Tower Two		
Tower Three		

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Welcome by the Head of Department

We are delighted to welcome you as the first cohort of students on our new MSc Data Science programme in the Department of Statistics.

The MSc in Data Science programme combines statistical and computational perspectives in a unique way, as well as providing a selection of elective courses in the broad area of economics and social sciences, such as those in finance.

Data Scientists are very much in demand across industry, including a variety of internet online services companies, marketers, banks, investment management, and other financial companies.

The Department of Statistics at LSE has an international reputation and has been the academic home for a host of distinguished statisticians. Currently the Department has three research groups: Probability in Finance and Insurance; Time Series and Statistical Learning; and Social Statistics.

LSE is one of the finest institutions of its kind in the world and has a key position, geographically in terms of its location in central London and geo-politically in term of its national and international standing. Our success very much depends on your success and we look forward to getting to know you and supporting you in your endeavours. I would like to wish you all the best for your studies here and I hope that you will make the most of your time with us.



Professor Pauline Barrieu Head of the Department of Statistics

Term dates

Michaelmas Term (MT)

Thursday 21 September – Friday 8 December (teaching begins on Monday 25th September 2017)

For departments with courses that will be examined in January, examinations will be held in week 0 (Tuesday 2 January – Friday 5 January). More information can be found here:

http://www.lse.ac.uk/resources/calendar/CourseAndProgrammeInfo/LentTermWeek0 Exams.htm *

Lent Term (LT)

Monday 8 January – Friday 23 March

Summer Term (ST)

Monday 23 April – Friday 8 June

For those courses that operate them, School Reading Weeks are the weeks beginning Monday 30 October 2017 and Monday 12 February 2018

The School will also be closed for English public holidays*. In 2017/18 these will be:

Christmas Closure	Thursday 21 December 2017 – Monday 1
	January 2018
Easter Closure	Thursday 29 March – Wednesday 4 April
	2018
May Bank Holiday	Monday 7 May 2018
Spring Bank Holiday	Monday 28 May 2018
Summer Bank Holiday	Monday 27 August 2018

*Some facilities, such as the Library, may open on some of these dates. The School will issue updates throughout the year.

The Department of Statistics

The Department of Statistics at the LSE is a growing, friendly department with an excellent reputation in many areas of statistics. It enjoys a unique position, comprising a body of professional statisticians in an economics and social science institution. The advantages of this position can be seen in the major contributions the Department has made in theoretical statistics and its applications in actuarial science, social statistics and econometrics.

The Department offers academic programmes at all levels: BSc, MSc and MPhil/PhD. It also shares teaching and research with other sections of the School that have strong interests in statistics, including the Department of Mathematics, the Department of Finance, the Department of Methodology, and the Department of Economics. The Department is home to the *LSE Centre for the Analysis of Time Series* (CATS) and also has close links with *The Royal Statistical Society* and *the Institute of Actuaries*.

The majority of staff in the Department are located on the 5th, 6th and 7th floors of Columbia House (COL) and the entrance is on Aldwych. The administrative (Professional Services Staff) offices are located on the 6th floor, COL 6.11, COL 6.12 and COL 6.13.



All Academic Staff

Name	Ext.	Areas of research
Dr Beatrice Acciaio <u>b.acciaio@lse.ac.uk</u> Teaches ST439 and ST440	020 3486 2957	Stochastic calculus and its applications in finance; risk measures and optimal risk sharing; robust finance and information asymmetry.
Dr James Abdey <u>J.S.Abdey@lse.ac.uk</u>	020 7955 6030	Forensic statistics; compound error methods; decision- theoretic foundations; economic and public sector applications; significance measures
Dr Matteo Barigozzi <u>M.Barigozzi@Ise.ac.uk</u> (On Sabbatical Leave MT 2017)	020 7955 6063	Time series analysis; dynamic factor models (stationary and non- stationary); volatility modelling; graphical models and social networks.
Prof Pauline Barrieu <u>P.M.Barrieu@lse.ac.uk</u> Head of Department	020 7955 6016	Model uncertainty; insurance-linked securitization; contract designing; environmental economics; and financial mathematics.

Dr Erik Baurdoux <u>E.J.Baurdoux@lse.ac.uk</u> Deputy Head of Department for Teaching Teaches ST426	020 7955 6717	Optimal stopping; stochastic games; Lévy processes; financial and insurance mathematics
Dr Wicher Bergsma <u>W.P.Bergsma@lse.ac.uk</u> Teaches ST421	020 7955 6725	Categorical data analysis; statistical learning; testing independence; multivariate analysis; graphical modelling
Dr Luciano Campi I.campi@Ise.ac.uk Teaches ST435 On sabbatical leave LT 2018	020 7955 6013	Stochastic calculus and its applications to finance; Information asymmetry and insider trading; credit risk; financial markets and transaction costs; energy markets
Prof Umut Cetin <u>U.Cetin@Ise.ac.uk</u> Teaches ST441	020 7955 7644	Stochastic calculus; theory of martingales and Markov processes; liquidity risk and credit risk modelling; asymmetric information in financial markets; carbon finance.
Dr Yining Chen <u>y.chen101@lse.ac.uk</u> Teaches ST444 and ST447	020 7955 6865	Shape-constrained estimation; nonparametric classification and regression; semiparametric modelling; time series analysis.

Prof Angelos Dassios <u>A.Dassios@lse.ac.uk</u> On sabbatical leave MT 2017	020 7955 7749	Stochastic processes; theory & applications of piecewise deterministic Markov processes; risk theory; insurance and financial applications of stochastic processes.
Prof Piotr Fryzlewicz <u>P.Fryzlewicz@lse.ac.uk</u> Teaches ST436	020 7955 7953	Multiscale modelling and estimation; time series (especially nonstationary time series); change-point detection; high- dimensional statistical inference and dimension reduction; randomised algorithms; statistical learning; data visualisation; statistics in finance; statistics in the social sciences; statistics in neuroscience.
Dr Sara Geneletti <u>S.Geneletti@lse.ac.uk</u> On research leave 2017/18	020 7955 7646	Causal inference, graphical models, Bayesian inference, evidence synthesis
Dr Kostas Kalogeropoulos <u>K.Kalogeropoulos@lse.ac.u</u> <u>k</u> On sabbatical leave 2017/18	020 7955 6017	Bayesian inference, Markov Chain Monte Carlo, sequential Monte Carlo, inference on models with stochastic differential equations, infectious disease modelling with evidence synthesis.

Prof Kostas Kardaras <u>K.Kardaras@lse.ac.uk</u> Teaches ST409	020 7955 7169	Stochastic analysis, martingales and the general theory of stochastic processes, foundations of mathematical finance and economics, stochastic control and optimisations and Monte Carlo methods
Dr Jouni Kuha <u>J.Kuha@lse.ac.uk</u> Programme Director, MSc Statistics and MSc Statistics (Social Statistics)	020 7955 6835	Model selection; models with measurement error and missing data; latent variable models; analysis of cross- national survey data; social statistics.
Dr Clifford Wai-Fung Lam <u>C.Lam2@lse.ac.uk</u> Programme Director, MSc Statistics (Financial Statistics) Teaches ST422	020 7955 7636	Semiparametric modelling; variables and feature selections; regularization methods; high-dimensional data analysis; time series and factor modelling; spatial econometrics modelling
Prof Irini Moustaki <u>I.Moustaki@Ise.ac.uk</u> Deputy Head of Department for Teaching and Strategy Teaches ST405 & ST416	020 7107 5172	Latent variable models; structural equation models; categorical data; missing values; outliers; composite likelihood estimation methods; applications to social sciences and health
Dr Xinghao Qiao <u>x.qiao@lse.ac.uk</u> Teaches ST443	020 7955 6880	Functional and longitudinal data analysis; high dimensional statistics; statistical machine learning; time series analysis

		1
Prof Chris Skinner <u>C.J.Skinnner@lse.ac.uk</u> Teaches ST411 On sabbatical leave MT 2017	020 7955 6726	Sample surveys; measurement error; missing data; statistical disclosure control; official statistics; social science applications.
Prof Leonard Smith L.Smith@lse.ac.uk On sabbatical leave LT 2018 Note that in LT 2018, this course will be taught by <u>Dr</u> <u>Edward Wheatcroft</u> who is based in the Centre for the Analysis of Time Series.	020 7955 7626	Time series; non-linear time series and chaos
Prof Fiona Steele <u>F.A.Steele@lse.ac.uk</u> On sabbatical leave 2017- 18	020 7955 6236	Statistical methods for social research; multilevel modelling; longitudinal data analysis; event history (survival) analysis; structural equation modelling; applications in demography, psychology, education and epidemiology.
Dr George Tzougas <u>g.tzougas@lse.ac.uk</u> Teaches ST433	020 7955 7646	Mixture models, EM algorithm, distribution theory, risk theory and actuarial modelling, design of optimal bonus-malus systems, reinsurance, claims reserving and ruin theory.

Professor Milan Vojnovic <u>m.vojnovic@lse.ac.uk</u> Teaches ST445 and ST446 Programme Director for MSc Data Science	020 7107 5146	Data science, machine learning, artificial intelligence, game theory, multi-agent systems, information networks.
Dr Hao Xing H.Xing@lse.ac.uk Programme Director for MSc Risk and Stochastics Teaches ST429 On sabbatical leave LT 2018	020 7955 7629	Stochastic analysis, analysis of differential equations, stochastic control and their applications to finance and insurance; economic models of interacting agents.
Prof Qiwei Yao <u>Q.Yao@lse.ac.uk</u> Teaches ST425 On sabbatical leave 2017/18 (but will continue to teach ST425)	020 7955 6767	Time series analysis; factor modelling and dimension reduction; nonparametric regression; spatial and temporal modelling; financial econometrics.

Professional Services Staff

COL 6.11, the administration office of the Department of Statistics is open 10.00am– 1.00pm and 2.00pm–4.00pm, Monday to Friday. The office is located on the 6th Floor of Columbia House.

Name	Room	Phone No.	Email
Imelda Noble Departmental Manager	COL 6.13	020 7955 7731	i.noble@lse.ac.uk
Sarah McManus MSc Programme Administrator	COL 6.11	020 7955 6879	<u>s.mcmanus@lse.ac.uk</u>
Steve Ellis Undergraduate Programme Administrator	COL 6.11	020 7955 7650	<u>s.j.ellis@lse.ac.uk</u>
Penny Montague Research Administrator	COL 6.12	020 7955 7511	p.montague@lse.ac.uk
Penny Smith Events and Communications Officer	COL 6.12	020 7955 5127	p.a.smith@lse.ac.uk

Communication from the School and the Department

LSE for You

LSE for You is a personalised web portal which gives you access to a range of services. For example, you can:

- view or change your personal details
- reset your Library and network passwords
- monitor and pay your tuition fees online
- check your exam results

You can also access online tutorials on how to navigate and personalise LSE for You via its login page. Use your LSE network username and password to login via <u>Ise.ac.uk/Iseforyou</u>.

Contacting you by phone/post

Sometimes it will be necessary for us to post information to you, or for urgent matters, to contact you by telephone. It is important that the School has your correct contact details. If your contact details change please amend your details via LSE for You.

Face-to-face contact

All academic staff hold Advice and Feedback Hours, which are designated for meeting with students. Matters related to an individual course should normally be discussed with the teacher in charge; and therefore the Advice and Feedback hours are an important supplement to the teaching.

Matters of a more general nature – for example academic, teaching and learning, prospective careers - can of course be discussed with any teacher serving on the programme. This also goes for personal matters affecting individual progress of studies, but in such cases, please remember that you can always get in touch with your Programme Director (since the Programme Director may need to be kept informed of these matters anyway). If you aren't able to attend their Advice and Feedback Hours, you can always email or call them to arrange an appointment outside of these hours. Please don't feel awkward about doing so, as they are there to help you.

Bear in mind that Advice and Feedback Hours are subject to change, so please ensure that you check our <u>website</u>, where these are kept updated.

E-mail

The School and the Department of Statistics will use your LSE email address to communicate with you so you should check it regularly (at least once a day during term time between 9am-5pm). Information on course arrangements, meeting, seminars and also job advertisements, are distributed by e-mail and via Moodle.

The email program Microsoft Outlook is available on all student PCs on the LSE network. You can also access e-mail off-campus using webmail and remote desktop or on the move, using email for laptops and mobile phones. For instructions on how to access your e-mail off campus, visit http://www2.lse.ac.uk/intranet/LSEServices/IMT/remote

MSc Administrator Newsletter

The MSc Administrator also sends a fortnightly email update during term time. This contains crucial information about your studies, such as coursework submission and other important deadlines; as well as updates on events happening in the Department, job vacancies and learning and development opportunities.

Facebook

Many of you will already be familiar with the Offer-holders Facebook group. The group will continue throughout your time at LSE and the MSc Administrator will continue to post information about careers and social events amongst other things.

Please note however that Facebook is not a substitute for email; and you should always check your email first and foremost for any important information.

If you have not yet joined the group, you can request to do so here: <u>https://www.facebook.com/groups/1415911115096740/</u>

Twitter

Follow us on Twitter @StatsDeptLSE for information about seminars and events both in the Department and the School, as well as a wealth of other useful information! Our Twitter feed also links to our Facebook page, so you don't have to be on Twitter to see all our Tweets. <u>https://twitter.com/statsDeptLSE</u>

Moodle

Moodle is LSE's Virtual Learning Environment (VLE). It is a password protected web environment that contains a range of teaching resources, activities, assignments, information and discussions for your course. The content of Moodle is the responsibility of your teacher and so it will vary from course to course; not all teachers choose to use Moodle.

You can access Moodle from any computer connected to the internet, on and off campus. Go to <u>http://moodle.lse.ac.uk/</u> and use your LSE user name and password to log in. This page also has links to help and advice on using Moodle.

You will also find links to Moodle from a number of web pages, including the webpage for 'Staff & Students'. If you have any technical problems with Moodle you should contact the helpdesk at <u>it.helpdesk@lse.ac.uk</u>.

Student Staff Liaison Committee (SSLC)

At the start of the year the Department will ask for volunteers to represent your programme on the Staff Student Liaison Committee. These are important Committees as they provide a forum for feedback from students on their programme and for discussion of issues which affect the student community as a whole. The role of an SSLC representative is therefore central to ensuring that courses and

programmes in the School work efficiently; and those elected or chosen as a representative will be given training.

SSLC meetings are held once a term in Michaelmas and Lent Term, with refreshments provided.

The SSLC also elects one representative to attend the relevant School level Students' Consultative Forum. More information on the Consultative Fora can be found here: http://www.lse.ac.uk/studentRepresentation/home.aspx



Department of Statistics Online Feedback Form

If you have any ideas, concerns, or comments for the Department of Statistics, you can post this anonymously via the Online Feedback Form which is managed by the Students Union. Feedback, as well as our responses will be published on the

Department of Statistics website. All the information will be anonymised and will not be attributable to any individual.



Events

Seminars

All MSc students are encouraged to attend the seminars that are organised by the Department. Details regarding events are sent out via regular emails and are also announced on Twitter; therefore all students are advised to follow the Department of Statistics on Twitter, <u>@StatsDeptLSE</u>

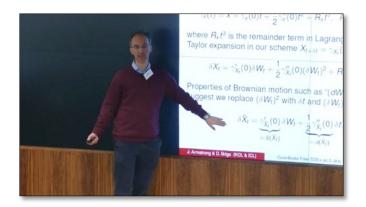
The Joint Probability in Finance and Insurance and Financial Mathematics Seminar Series run regularly during term time. These seminars aim to promote communication and discussion of research in the mathematics of insurance and finance and their interface, to encourage interaction between practice and theory in these areas, and to support students academically in related programmes at postgraduate level.

Students can also attend the London Mathematical Finance Seminar Series. Further details will be published soon and can be found here: <u>http://www.londonmathfinance.org.uk/</u>

Probability in Finance and Insurance Annual Conference

The two-day Probability in Finance and Insurance Conference (formerly known as the Risk and Stochastics Conference) is an annual two-day event, normally held in the Lent term. High profile speakers from the UK and overseas present recent advances in the areas of risk and stochastics and financial mathematics and there is plenty of opportunity to network. Dates for the 2017/18 conference will be announced in due course and students will be notified as soon as this happens. The event is free to all students.

http://www.lse.ac.uk/statistics/events/events.aspx



MSc Data Science Programme Structure

The MSc in Data Science provides training in data science methods, with a focus on statistical perspectives. You will receive a thorough grounding in theory, much of it at a high mathematical level, as well as gain practical skills of applied data science, enabling you to apply advanced methods of data science and statistics to investigate real world questions.

Our taught postgraduate courses are based around lectures, with problem classes and computer workshops. The courses are assessed by a combination of exams, coursework and in-class assessment.

Where a course is assessed by an exam, in the majority of cases, this will take the form of a two-hour exam in the Summer Term; however please be aware that some exams, for example, ST429 Statistical Methods for Risk Management, are assessed by a Lent Term Week 0' examination between Tuesday 2nd January and Friday 5th January 2018. Please see individual <u>course guides</u> for more information.

Students must take courses to the value of **four full units**. The courses in the programme are divided into two categories: **compulsory** courses and **options**.

Students must take the following **five compulsory half-unit** courses (the equivalent of 3.0 units):

- <u>MY470</u> Computer Programming (H)*
- <u>ST445</u> Managing and Visualising Data (H)
- <u>ST447</u> Data Analysis and Statistical Methods
- <u>ST443</u> Machine Learning and Data Mining (H)
- <u>ST498</u> Capstone Project/Dissertation

Then a choice of **two** from the following 0.5 unit **optional** courses:

- <u>MA407</u> Algorithms and Computation (H)
- MA424 Modelling in Operations Research (H)
- <u>MY459</u> Quantitative Text Analysis (H)
- <u>MY461</u> Social Network Analysis (H)
- <u>ST405</u> Multivariate Methods (H)
- ST411 Generalised Linear Modelling and Survival Analysis (H)
- <u>ST422</u> Time Series (H)
- <u>ST429</u> Statistical Methods for Risk Management (H)
- <u>ST436</u> Financial Statistics (H)
- <u>ST444</u> Statistical Computing (H)
 - ST446 Distributed Computing for Big Data (H)

Notes

*Students who can demonstrate equivalent prior knowledge of MY470 Computer Programming, and/or ST447 Data Analysis and Statistical Methods, via transcripts of prior qualifications, may replace either or both these courses with the equivalent number of optional courses from the list above.

Additional Programme Information

Postgraduate Course Choice, Seminar Sign Up and Personal Timetables

LSE Course Finder <u>https://apps.lse.ac.uk/coursefinder</u> will help you to choose which courses to take within your programme regulations. Course Finder allows you to browse available courses by unit value, keyword, department, and assessment type. You can build a shortlist of courses and compare the Lecture Timetable for that shortlist. Course Finder will be open from 10:00 on Monday 18 September 2017 to 12:00 on Monday 9 October 2017, and is available to registered students.

Once you have selected your shortlist, you must choose all of your courses, including any compulsory courses and your dissertation, in LSE for You.

Course choice opens for browsing during Welcome Week so that you can get used to the system however you will not be able to make any choices during this period. The system opens fully from **Friday 22 September 2017** to fully registered students. The deadline for course choices for postgraduate students is **Monday 9 October 2017**. The system will re-open at the beginning of Lent Term so you can make any changes that are needed for Lent Term.

Full information on how to select course can be found at <u>lse.ac.uk/coursechoice</u>. Here you will find links to the programme regulations which outline your available course choices and a course guide for each of them. You will also find tutorials on how to use the Graduate Course Choice system.

Some graduate courses have been designated as 'controlled access' due to limited places and/or prerequisites that are required in order to study the course. You will need to apply to the department teaching the course for permission to take it using the course choice system. These courses are highlighted in the course choice system. You will be notified of the outcome of your request to take a controlled access course by email. If you have been offered a place on a controlled access course, you must use the course choice system to indicate whether you would like to accept or decline the offer within two working days of receiving the offer email. After this time the offer will expire. Your overall selection of courses is also subject to the approval of your home department.

Some academic departments allocate places to seminars centrally whilst others permit you to choose using the seminar signup facility in LSE for You. You can see which method is used for each of your registered courses in the seminar sign-up system. If you wish to change your seminar you should contact the department teaching the course for more information.

Once you have successfully registered for your courses and seminars in LSE for You, your personal timetable will be automatically generated for you. There is usually around a 15 minute delay between successful course registration and your timetable being updated.

Interruption/Deferral/Withdrawal/Transfers/Change of Mode of Study

Interruption: with approval from your department you can take a break in your studies. Interruptions are one calendar year long. You are usually required to return at the start of the nearest applicable term – be that Michaelmas or Lent term. Summer term interruptions are not possible. For more information, please see <u>lse.ac.uk/interruptions</u>

Deferral: if you complete the teaching year but have difficulties in the lead up to or during the exam period, then in exceptional circumstances you can seek to defer assessment(s) to the following academic year. For more information, please see <u>lse.ac.uk/deferrals</u>

Withdrawal: withdrawing means that you are leaving the programme permanently. Before withdrawing you may want to consider interruption so that you have some time to consider your options. For more information, please see <u>lse.ac.uk/withdrawals</u>

Programme Transfers: 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 on transferring programmes, and sometimes transfers are not possible. All transfer requests are considered by and require approval from both academic departments and the School before being authorised. For more information, please see:

http://www.lse.ac.uk/intranet/students/registrationTimetablesAssessment/Registration/Changes/transfer.aspx

Change of Mode of Study (for postgraduate students): if a change in your circumstances occurs that means that you need to change your study mode from full-time to part-time, you will need to seek authorisation from your academic department. Changing from full-time to part-time study mode is generally acceptable, and your course choice will be amended according to programme regulations. Your fees will also be amended in line with the part-time fees published in the Table of Fees for the same academic year. Changing from part-time to full-time may not always be possible. Requests to change from part-time to full-time study mode will be considered on a case-by-case basis. For more information please see: www.lse.ac.uk/PTchange

Studying and Assessment

Assessment

Formal assessment, which counts towards your final degree results (also known as *summative assessment*), can take several different forms. Most MSc courses are primarily assessed by an unseen written examination in the summer term. A half unit course is usually assessed by a two-hour examination and a full unit course by a three-hour examination.

Some courses also include assessed coursework as part of summative assessment, and in particular, some courses on MSc Data Science will include in-course assessment. Please refer to the course guides on the LSE web site to find out the assessment form for each course. When there is assessed coursework, the course lecturer will give you detailed instructions for it. Further guidance on submission of assessed coursework is given below.

Please note that we are unable to provide feedback on written examinations.

Assessment Criteria

Assessment criteria are descriptors of what the department expects from students, which distinguish between different grades. Postgraduate courses and degrees in the Statistics Department conform to the description in the 'Subject Benchmark Statement for Mathematics, Statistics and Operational Research' detailed by the Quality Assurance Agency for Higher Education. This details assessment criteria required for a student to achieve a "threshold standard" (i.e., to pass a course) and a "typical standard" (roughly sufficient for a mark of 60). Specific assessment criteria may also be confirmed verbally during lectures on a course by course basis. Should you have any queries on what is expected for a specific course as to how it will be assessed, please use staff Advice and Feedback Hours to ask your teacher directly.

Threshold standard:

5.13 A graduate who has reached the threshold level should be able to:

- Demonstrate a reasonable understanding of the basic body of knowledge for the programme of study.
- Demonstrate a reasonable level of skill in calculation and manipulation within this basic body of knowledge.
- Apply core concepts and principles in well-defined contexts, showing judgement in the selection and application of tools and techniques.
- Understand logical arguments, identifying the assumptions and conclusions made.
- Demonstrate a reasonable level of skill in comprehending problems, formulating them mathematically and obtaining solutions by appropriate methods.
- Present straightforward arguments and conclusions reasonably accurately and clearly.
- Demonstrate appropriate general skills.
- Demonstrate the ability to work professionally under guidance, seeking assistance when needed

Typical standard:

5.15 A graduate who has reached the typical level should be able to:

- Demonstrate a reasonable understanding of the main body of knowledge for the programme of study
- Demonstrate a good level of skill in calculation and manipulation of the material within this body of knowledge
- Apply a range of concepts and principles in loosely-defined contexts, showing effective judgement in the selection and application of tools and techniques
- Develop and evaluate logical arguments
- Demonstrate skill in abstracting the essentials of problems, formulating them mathematically and obtaining solutions by appropriate methods
- Present arguments and conclusions effectively and accurately
- Demonstrate appropriate general skills
- Demonstrate the ability to work professionally with a degree of independence, seeking assistance when needed.

Taken from:

http://www.qaa.ac.uk/en/Publications/Documents/Subject-benchmark-statement-Mathematics-statistics-and-operational-research.pdf

Assessed Coursework

All assessed coursework, such as projects or take-home assessments, are submitted using the drop box located on the 6th floor of Columbia House. When submitting coursework:

- Ensure all work is bound securely. Your teacher should issue guidance on this when the coursework is set. Although the administrative office does provide a stapler for your use it will only hold smaller pieces of work. Larger projects will need to be secured within a folder.
- You must also complete a plagiarism statement and submit this **separately from your coursework**. This declaration is required for coursework submitted as part of the formal assessment of a degree. It is a statement to the effect that you have read and understood the School's rules on assessment offences and that the work submitted is your own apart from properly referenced material.

You can download the plagiarism statement from your programme Moodle page. Copies are also available on top of the drop box on the 6th floor of Columbia House.

You should also attach a cover sheet to your work. Your tutor will instruct you as to what information you should include but it should always display your exam candidate number, which is available through LSE for You. **Do not write your name anywhere on your work as it is marked anonymously.**

Receipt of your coursework

The drop box is emptied on a regular basis during a coursework submission period. All work submitted after the published deadline will be marked as late. Please note that even if you submit your work on the deadline date, if it is after the stated time, it will be stamped with the following day's date and treated as one day late. If you submit your coursework late please inform the MSc Administrator to prevent the coursework being missed and left in the drop box. Following submission of your coursework, the MSc Administrator will confirm receipt by email.

Late coursework

According to the School regulations:

If a student fails to submit by the set deadline (or extended deadline as appropriate) the following penalty will apply:

Five marks out of 100 will be deducted for coursework submitted within 24 hours of the deadline and a further five marks will be deducted for each subsequent 24-hour period (working days only) until the coursework is submitted.

http://www.lse.ac.uk/intranet/LSEServices/TQARO/Calendar/GeneralAcademicRegul ations.pdf

Important Notes on Plagiarism:

The work you submit for assessment must be your own. If you attempt to pass off the work of others as your own, whether deliberately or not, you are committing plagiarism. If you are found to have committed an assessment offence (such as plagiarism or exam misconduct) you could be expelled from the School.

Any quotation from the published or unpublished works of other persons, including other candidates, 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 from 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, examination scripts, dissertations, essays, computer programmes) must be solely your own. You must not employ a "ghost writer" to write parts or all of the work, whether in draft or as a final version, on your behalf. For further information and the School's Statement on Editorial Help, see link below. 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 an offence of "selfplagiarism" 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 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 Programme Director, dissertation supervisor, <u>LSE</u> <u>LIFE</u> or the <u>Library</u> as soon as possible.

The Regulations on Plagiarism can be found at the following web links:

- http://www.lse.ac.uk/resources/calendar/academicRegulations/RegulationsOn AssessmentOffences-Plagiarism.htm
- http://www.lse.ac.uk/resources/calendar/academicRegulations/statementOnE ditorialHelp.htm

Feedback

Feedback is provided throughout the course of study. The method of feedback varies between modules and the following should provide you with an outline of what to expect:

Weekly exercises

A weekly set of homework may be set. Students will not be expected to submit this homework but will go over the exercises in the following seminar with the lecturer.

Coursework

Students may also complete one or two sets of formative coursework ('formative' means formal and informal assessment procedures conducted by teachers during the learning process in order to modify teaching and learning activities) during the year, which will be marked. A set of coursework similar to the exercises that will appear in the exam will be assigned. Feedback will be provided.

MSc Study Space in the Department of Statistics

The 7th floor of Columbia House includes an open plan study space for the use of MSc students from the Departments of Statistics.

The study space has three fully networked PCs; as well as power and network points for the use of personal laptops and other electronic devices. Please take care to look after anything valuable; as the Department and the School cannot take responsibility for stolen or damaged items. Please ensure that the space is kept clean and tidy for the benefit of all MSc students who will be using it. Misuse of the space of any kind will not be tolerated. As the space is adjacent to academic offices, please also ensure that noise is kept to a minimum.

Textbooks

All textbooks that are essential for the courses are available from the Library and from Waterstones Economists' Bookshop in St. Clements Building.

Examination dates

With the exception of those examinations that are scheduled during Lent Term Week 0 (see page 17), Summer examinations normally take place between the first week of May and the first week of June. The course-by-course examination timetable will be published on the LSE website by the end of Lent Term. Student's individual timetables will be published on LSE for You very early in the Summer term. Further details of exactly when these become available will be circulated nearer the time.

Some important points to note: -

- If a student has to re-sit or defers an examination the next opportunity to do so will be in the next academic year during the equivalent examination period as the original failed or deferred examination.
- There is no provision for exam scripts to be remarked and you are not allowed to access any of your exam scripts. However, you can request an administrative mark check (a small fee is charged) if you are a borderline mark or failed the exam.
- No exam results are disclosed before the official exam result publication date and results can never be given out via email or phone.
- You will not be able to be re-examined in any course which you have already passed.
- If you do not complete all aspects of a course i.e. hand in your assessed work, then you will be deemed incomplete and will receive '0' marks for that particular course and have to re-sit the missing element the following year.

Results and transcripts of results

The School releases confirmed marks once the relevant School Board of Examiners has ratified them. For further information, please see <u>lse.ac.uk/results</u>.

To ensure that your results are released as scheduled, please check your balance on LSE for You to see if you have any outstanding fees. You should contact the Fees Office on <u>fees@lse.ac.uk</u> if you have any queries, as the School will not release your results if you have an outstanding debt.

Transcripts for finalists are issued digitally within ten working days of publication of final results. Continuing students will be able to request an 'intermediate transcript' of results as soon as they are officially published.

For more information, please see <u>lse.ac.uk/transcripts</u>.

Graduation Ceremonies

Graduation ceremonies are held twice a year: in July for students who have followed undergraduate or nine- or ten-month taught postgraduate degree programmes and in December for students who have followed twelve-month taught postgraduate degree programmes. MPhil/PhD research students are presented at both the July and December ceremonies, in July for those awarded by 30 April and in December for those awarded by 30 September.

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

Degree Certificates

The degree certificate gives your full name, level of award, programme of study, and class of degree or other award obtained.

It will be available for collection on the graduation ceremony days of the relevant graduation period in July or December. If you don't collect it at the ceremony, it will be posted to your home addresses within eight weeks. It is therefore essential that you keep your details up-to-date on LSE for You.

For more information, please see lse.ac.uk/degreeCertificates

MSc Student Prizes



The Department of Statistics has teamed up with Winton to award two prizes to MSc Data Science students. Each prize is worth £500 respectively.

One prize is the 'Winton Prize for Academic

Excellence in MSc Data Science'. This prize will be awarded to the MSc Data Science student with the highest overall mark in their assessments.

The other prize is the 'Winton Prize for Best Dissertation in MSc Data Science'. This prize will be awarded to the MSc Data Science student with the highest mark in their dissertation.

These prizes will be discussed at the October exam board and a winner will be chosen in agreement with the MSc Data Science Sub-board members, and the School's External Examiner. The winners will be notified as soon as possible after a decision has been made.

School Services, Policies and Regulations

Programme Regulations

The School has regulations, policies and procedures covering many aspects of student life and you should familiarise yourself with them.

Some of the regulations explain the organisation and conduct of your academic study. These include information about the structure of programmes, assessment, graduation and what to do if illness affects your studies.

The following web searches/web links detail the School's Programme Regulations.

Regulations for Diplomas Regulations for First degrees Regulations for the consideration of appeals against decisions of boards of examiners for taught courses Regulations for research degrees Regulations for Taught Masters degrees (entering in or after 2009/10) Regulations for research degrees Regulations on assessment offences: other than plagiarism (i.e. Exam Misconduct)

And the following web link gives you an A-Z list of relevant regulatory documents where you can find further details of all School Regulations. http://www2.lse.ac.uk/intranet/LSEServices/policies/home.aspx

What to do if you are ill during your studies:

Information about the School's procedure can be found here: <u>http://www.lse.ac.uk/intranet/students/registrationTimetablesAssessment/examinationsAndResults/exceptionalCircumstances/illnessExceptionalCircumstances.aspx</u>

You may also wish to refer to the policies below from time to time:

<u>Code of Good Practice for Taught Masters Programmes</u> <u>Code of Research Conduct</u> <u>Student Charter</u> <u>Research Ethics Policy, Procedures and Guidance</u>

Central School Services – Useful Links

LSE Alumni Association http://www.alumni.lse.ac.uk/s/1623/start-hybrid.aspx

LSE Accommodation http://www.lse.ac.uk/lifeAtLSE/accommodation/home.aspx

Careers Service https://info.lse.ac.uk/Current-Students/Careers

Counselling Services

http://www.lse.ac.uk/intranet/students/supportServices/healthSafetyWellbeing/advice Counselling/studentCounsellingService/Home.aspx

Disability and Wellbeing Service <u>http://www.lse.ac.uk/intranet/LSEServices/disabilityAndWellBeingService/home.aspx</u>

Equity, Diversity and Inclusion (EDI) https://info.lse.ac.uk/Staff/Divisions/Equity-Diversity-and-Inclusion

Finance Division

http://www.lse.ac.uk/intranet/LSEServices/financeDivision/feesAndStudentFinance/H ome.aspx

Financial Support Office (FSO) http://www.lse.ac.uk/intranet/students/moneyMatters/financialSupport/Home.aspx

International Student Immigration Visa Advice Team (ISVAT) http://www.lse.ac.uk/intranet/students/ISVAT/home.aspx

IT Services http://www.lse.ac.uk/intranet/LSEServices/IMT/home.aspx

Including:

- Access your Outlook account from anywhere
 <u>https://mail.lse.ac.uk/owa/auth/logon.aspx?replaceCurrent=1&url=https%3a%</u>
 <u>2f%2fmail.lse.ac.uk%2fowa%2f</u>
- Laptop Surgery <u>http://www.lse.ac.uk/intranet/LSEServices/IMT/remote/laptopSurgery/home.as</u> <u>px</u>

Language Centre http://www.lse.ac.uk/language-centre

Library <u>http://www.lse.ac.uk/library</u>

LSE LIFE http://www.lse.ac.uk/intranet/students/LSE-Life/lseLIFE.aspx

Medical Centre http://www.lse.ac.uk/intranet/LSEServices/medicalCentre/Home.aspx



Peer Support

http://www.lse.ac.uk/intranet/students/supportServices/healthSafetyWellbeing/advice Counselling/studentCounsellingService/peerSupport/peersupport.aspx

Student Services Centre (SSC)

http://www.lse.ac.uk/intranet/students/supportServices/studentServicesCentre/Home .aspx

Teaching and Learning Centre <u>https://info.lse.ac.uk/Staff/Divisions/Teaching-and-Learning-Centre/Teaching-and-Learning-Centre</u>

Teaching Quality Assurance and Review Office (TQARO) http://www.lse.ac.uk/intranet/LSEServices/TQARO/Home.aspx

Volunteer Centre https://info.lse.ac.uk/Current-Students/Careers/Volunteer-Centre

Widening Participation Centre

http://www.lse.ac.uk/study/undergraduate/informationForTeachersAndSchools/widen ingParticipation/home.aspx

Other Services on Campus and in the Local Area

General Campus Information <u>http://www.lse.ac.uk/student-life/Campus-life/The-</u> <u>campus</u>

Cafes and restaurants

http://www.lse.ac.uk/intranet/LSEServices/cateringServices/restaurantsAndCafes/Ho me.aspx

Dentist http://sardiniadental.com/

Faith Centre https://info.lse.ac.uk/Current-Students/Faith-Centre

Gym https://www.lsesu.com/gym/

Nursery http://www.lse.ac.uk/intranet/LSEServices/nursery/Home.aspx

Photocopying <u>http://www.lse.ac.uk/Library/Using-the-Library/Using-the-space-and-facilities</u>

Shops, Banks and Post Offices http://www.lse.ac.uk/intranet/LSEServices/LSEFacilitiesGuide/shopping.aspx

Socialising www.timeout.com/london/ www.londonnet.co.uk/

Squid Card https://www.squidcard.com/support/LSE

Transport http://www.lse.ac.uk/intranet/students/campusLondonLife/transport.aspx



lse.ac.uk/statistics