THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

Department of Statistics
Programme Q&A Session

MSc Data Science

Introduction

- Sarah McManus:
  - MSc Programmes Manager
  - Office: COL 6.11 (campus map)
  - E-mail: stats-msc@lse.ac.uk

- Zoltan Szabo:
  - Programme Director and academic mentor to all MSc Data Science students
  - Office: COL 5.14
  - E-mail: z.szabo@lse.ac.uk

How can Sarah help you?

- Answer non-academic queries related to
  - department policies,
  - school policies,
  - wellbeing,
  - events, . . .

How can Zoltan help you?

- Provide advice on and give final approval of course choices at the beginning of Autumn and Winter Term.
- Discuss any academic challenges you may experience.
- Provide pastoral guidance on non-academic issues and refer you, as necessary, to other support services in the School.
- Maintain regular contact with you through direct one-to-one meetings and through regular email contact as needed.
- Follow up on any concerns regarding your attendance and progress.

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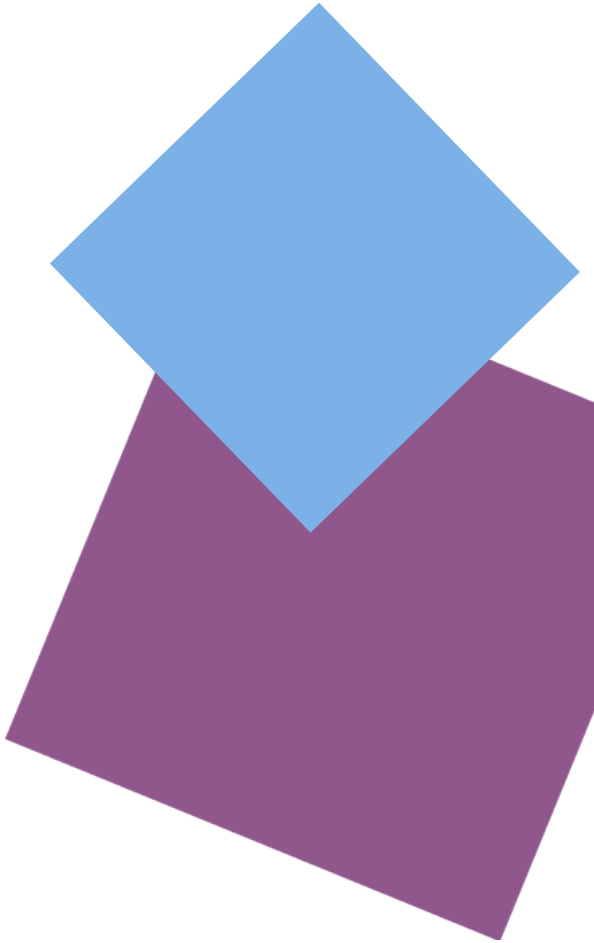
Programme structure: 4 units

See more details in the Programme Regulations, accessed via the LSE Calendar.

- Compulsory:
  - ST443 Machine Learning and Data Mining (H),
  - ST445 Managing and Visualising Data (H),
  - ST447 Data Analysis and Statistical Methods (H),
  - ST498 Capstone Project (F).

    ⇒ 2.5 = 3 × 0.5 + 1.
- Optional courses: 1.5 = 3 × 0.5 (≥ 0.5 unit of ST***)
  - next pages.



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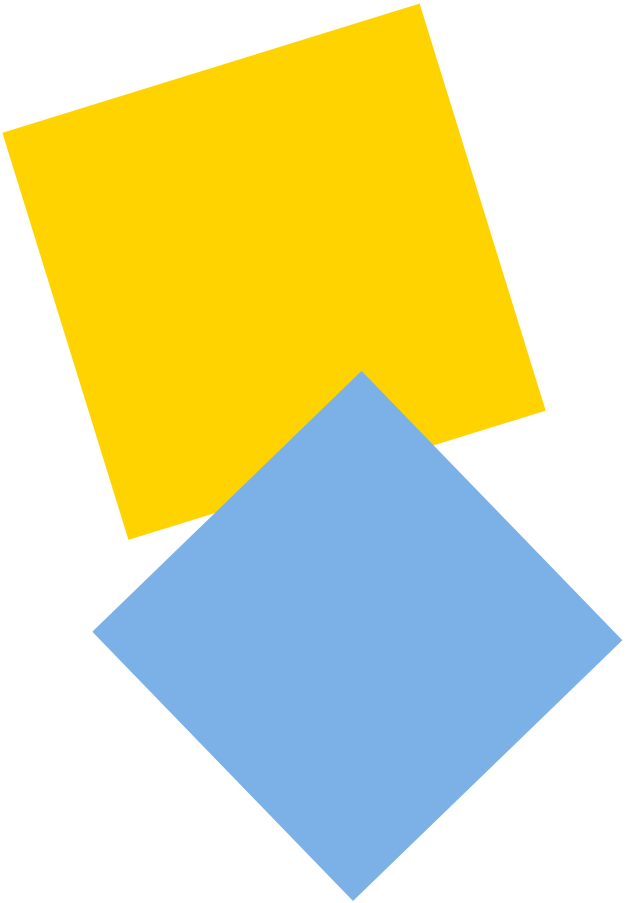
- Data science options [ST = statistics]:
  - ST444 Computational Data Science (H),
  - ST446 Distributed Computing for Big Data (H),
  - ST449 Artificial Intelligence (H),
  - ST451 Bayesian Machine Learning (H),
  - ST455 Reinforcement Learning (H),
  - ST456 Deep Learning (H),
  - ST457 Graph Data Analytics and Representation Learning (H),
  - ST459 Quantum Computing (H) – new!



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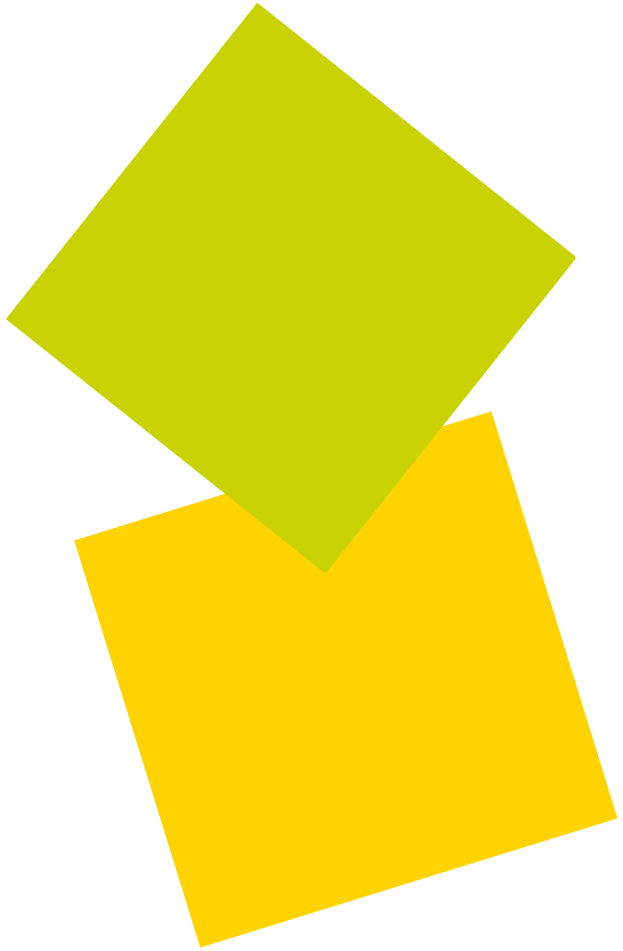
- Other statistics [ST = statistics]:
  - ST405 Multivariate Methods (H),
  - ST411 Generalised Linear Modelling and Survival Analysis (H),
  - ST422 Time Series (H),
  - ST429 Statistical Methods for Risk Management (H),
  - ST436 Financial Statistics (H),
  - ST454 Applied Spatio-temporal Analysis (H).



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- Options from other departments [MA = maths, MY = methodology]:
  - MA407 Algorithms and Computation (H),
  - MA424 Modelling in Operations Research (H),
  - MY459 Quantitative Text Analysis (H),
  - MY461 Social Network Analysis (H),
  - MY470 Computer Programming (H).

Note on course selection

- Most courses in the Dept. of Statistics: controlled access
  - limited numbers and you must meet their pre-requisites.
- Many other departments operate similarly: complete list.
- Essential:
  - Select your courses ASAP to maximize your chances of being accepted!

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Capstone project

- Real-world data science project with a company (Nov – Aug)

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Questions arrived

- Q1: In what months is the Capstone Project?
- A1: Nov. – Aug.
- Q2: Is a dissertation not required for the MSc Data Science programme?
- A2: Correct; you'll have Capstone project instead.
- Q3: In the first 3 courses … theory and application, or theory only?
- A3: Both (theory → lecture; applications → seminar).

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Questions arrived - 2

- Q4: What industries do graduates usually enter?
- A4: Applied maths => various sectors, e.g.
  - Financial and Professional Services,
  - Information, Digital Technology and Data,
  - FMCG (fast-moving consumer goods), Manufacturing and Retail,
  - Accounting and Auditing,
  - Government, Public Sector and Policy.

Questions arrived - 3

- Q5: What career development services does the school offer, such as internship opportunities, career guidance, and alumni networks?
- A5:
  - LSE Careers (career advisory services and support),
  - Department: Statistics Research Showcase (includes talks from alumni), Alumni Mixer events, Seminars.
  - More on career services from Sarah & 3 current students (May 29, 1pm-).

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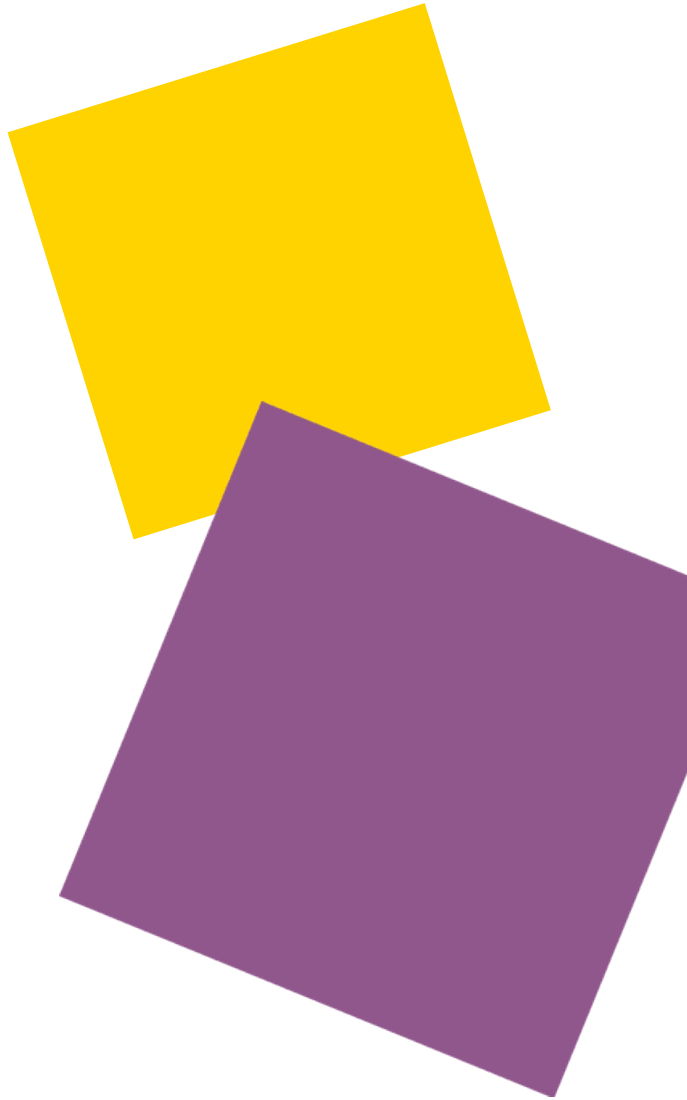
Useful skills to pick up

- LaTeX (Overleaf): high-quality article/book/TR/poster/business card/. . . with minimal effort.
- Writing etiquette:
  - Top ML conferences: NeurIPS, ICML, AISTATS, UAI, COLT,
  - Top journal: JMLR.
- Publication morale: open, often conference; arXiv (stat.ML, cs.LG, math.OC).
- Mailing lists: ML-News, UAI, allstat, Connectionists.
- Programming language: Python, R.
- Operating system: Linux.



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Academic support throughout your studies

Academic Mentor – Programme Director

Programmes manager

LSE Life: academic workshops

Language Centre

Academic Support Librarians

Digital Skills Lab

Getting In Touch

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Questions about the Department or the MSc Data Science:

Sarah McManus

MSc Programmes Manager

First point of contact for administration

Email: Stats-Msc@lse.ac.uk

Zoltan Szabo

MSc Data Science Programme Director

First point of contact for academic queries

E-mail: Z.Szabo@lse.ac.uk

Questions about your application: Graduate Admissions Office

Search ‘LSE Graduate Admissions’ then go to the Knowledge Base

If your question is not answered, submit an enquiry through the Knowledge Base

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Questions?