



**Imperial College  
London**

**Faculty of Natural Sciences  
Department of Mathematics**

**MSc in Statistics**

**Student Handbook**

**2023-24**

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## Welcome to the College

Congratulations on joining Imperial College London, the only university in the UK to focus exclusively on science, medicine, engineering and business.

From Fleming's discovery of Penicillin to Gabor's invention of holography, Imperial has been changing the world for well over 100 years.

You're now very much a part of this community of discovery and we hope you will take this opportunity to make your own unique contribution. At Imperial, we expect all members of our community, whether students or staff, to share and demonstrate our values of respect, integrity, collaboration, innovation and excellence in all we do and strive to achieve.

The College provides a dedicated support network and a range of specialist support services to make sure you have access to the appropriate help, whether that's further training in an academic skill like note taking or simply having someone to talk to.



You'll have access to an innovative range of professional development courses within our Graduate School throughout your time here, as well as opportunities to meet students from across the College at academic and social events – see page 6 for more information.

We actively encourage you to seek out help when you need it and try to maintain a healthy work-life balance. Our choice of over 360 clubs, societies and projects is one of the largest of any UK university, making it easy to do something different with your downtime. Access to the gym and other sporting facilities will be dependent on government guidance. We are working to ensure that you have access to a variety of resources online to support your health and wellbeing if there are restrictions.

As one of the best universities in the world, we are committed to inspiring the next generation of scientists, engineers, clinicians and business leaders by continuing to share the wonder of what we do through public engagement events. Postgraduate students, alongside our academics and undergraduate students, make a significant contribution to events such as our annual Imperial Festival and our term-time Imperial Fringe events – if you're interested in getting involved then there will be opportunities for you to do so.

## Our Principles

In 2012 the College and Imperial College Union agreed 'Our Principles'. This series of commitments was developed by academic and support staff in partnership with undergraduate and postgraduate students and Imperial college Union.

### **Imperial will provide through its staff:**

- A world class education embedded in a research environment
- Advice, guidance and support
- The opportunity for students to contribute to the evaluation and development of programmes and services

### **Imperial will provide students with:**

- Clear programme information and assessment criteria
- Clear and fair academic regulations, policies and procedures
- Details of full programme costs and financial support
- An appropriate and inclusive framework for study, learning and research

### **Imperial students should:**

- Take responsibility for managing their own learning
- Engage with the College to review and enhance provision
- Respect, and contribute to, the Imperial community

### **The Imperial College Students' Union will:**

- Support all students through the provision of independent academic and welfare assistance
- Encourage student participation in all aspects of the College
- Provide a range of clubs, societies, student-led projects and social activities throughout the year
- Represent the interests of students at local, national and international level



[www.imperial.ac.uk/students/our-principles](http://www.imperial.ac.uk/students/our-principles)

## Welcome from the Graduate School



Welcome to Imperial College London and the Graduate School!

The Graduate School is responsible for the postgraduate experience at the College and we work closely with Imperial College Union to ensure that when decisions are being made, which affect your time at Imperial, your voice is heard.

Another important aspect of our role is to offer you a free and exciting range of professional development opportunities which you can access wherever you are in the world.

Our team of tutors have a variety of research and other career experiences. We understand the importance of developing professional skills and our programmes will help you to progress in your academic studies and research and will prepare you for your future career. Whether you wish to pursue a career in academia, industry or something completely different, professional development training will improve your personal impact. You will also get to meet students from other Departments when attending our courses.

The Graduate School runs exciting competitions throughout the year which are an opportunity to broaden your knowledge as well as to meet other students and have fun.

Our primary way to communicate with you will be through our monthly e-newsletter and our weekly professional skills email bulletins. However, do check our website, blog and social media platforms to keep up to date with all the latest activities available to you.

Finally, Imperial College is an extremely exciting, stimulating and diverse environment in which to work, to study and to research. Do make the most of all that the College and your programme has to offer.

## The Graduate School

You automatically become a member of the Graduate School when you register as a postgraduate student at Imperial.

The Graduate School has been set up to support all postgraduate students at the College through:


- Training and development courses and retreats
- Networking activities, social and academic events to encourage cross-disciplinary interactions
- Forums to represent the views of postgraduate students throughout the College


### **'Masterclass' professional skills courses**

You can see the full range of free professional skills courses for postgraduate students on the Graduate School website: All courses can be booked online.



### **Contact us**

 Level 3, Sherfield Building, South Kensington Campus

 020 7594 1383

 [graduate.school@imperial.ac.uk](mailto:graduate.school@imperial.ac.uk)

 [www.imperial.ac.uk/students/academic-support/graduate-school/](http://www.imperial.ac.uk/students/academic-support/graduate-school/)

## 1. Introduction to the Department

### Welcome from Head of Department



Dear MSc Student,

Welcome to Imperial and welcome to the Department of Mathematics!

We are a diverse and world-leading research centre and a fantastic place to study – and I am delighted that you are joining us. You will be taught by outstanding academics, that themselves produce exciting new research in their fields.

I encourage you to take full advantage of the extensive resources and vibrant community that our department, Imperial and London have to offer.

Best wishes,

Professor Axel Gandy

### Welcome from Director of PG Studies



Dear MSc Students,

I'd like to offer you a very warm welcome to the Mathematics Department. The Department's academic staff and administrative support team hope to make your time at Imperial as rewarding and positive as possible. This handbook contains a wealth of useful information about your MSc programme — please read on and keep a copy at hand throughout your studies. Each of our five taught MSc courses (Applied Mathematics, Pure Mathematics, Mathematical Finance, Statistics, and Machine Learning and Data Science) are truly world-class programmes. I hope that you will find both your modules and your research project to be enriching and productive experiences. I also encourage you to engage fully with your MSc course. Many students find discussing mathematics with other students to be an essential element of learning. Your course lecturers will be very happy to discuss course material during office hours. Outside of your MSc, you will find some of the Departmental seminars and colloquia, at which you are welcome, to be enriching.

I wish you a productive and enriching year,

Dr Ryan Barnett

Director of Postgraduate Studies



## Welcome from Programme Director



Dear students,

It is with great pleasure to welcome you at Imperial, and on the MSc in Statistics.

You are about to embark on perhaps the most important educational year of your life that will provide you with the necessary skillset for a thriving career in statistics and data science. There is almost no other discipline that opens so many doors and provides so many professional opportunities as statistics – we play in everyone's backyard.

We have carefully designed a modern, visionary course to make sure that you gain experience across the entire breadth of statistical theory and its applications. The course will culminate with your statistical research project, in which you will have the opportunity to work closely with some of the leading statisticians in the UK. Throughout, you will benefit from modern, multi-mode teaching concepts that facilitate learning and provide you with a truly unique experience.

The course is run by the Statistics Section of the Department of Mathematics, which has an international reputation for conducting methodological and applied statistical research at the highest level. We have strong collaborations across Imperial, including the Data Science Institute, Imperial's Artificial Intelligence Network, or Imperial X, Imperial's new initiative for academia and industry to tackle some of the world's greatest challenges. I strongly encourage you to connect and engage with your fellow students and the academics of the Section – it is these interactions that will last a lifetime and make you excel.

I hope you will have a truly fruitful time at Imperial,  
Dr Oliver Ratmann-

## Academic and Administrative staff

	<p> Dr Ryan Barnett</p> <p>Director of Postgraduate Studies</p>	<p> 6M49 Huxley Building</p> <p> 0207 594 8536</p> <p> r.barnett@imperial.ac.uk</p>
	<p> Dr Oliver Ratmann</p> <p>MSc Statistics Programme Director</p>	<p> 525 Huxley Building</p> <p> msc.statistics.director@imperial.ac.uk</p>
	<p> Dr Gunnar Pruessner</p> <p>PG Senior Tutor</p>	<p> 6M32 Huxley Building</p> <p> 020 7594 8534</p> <p> g.pruessner@imperial.ac.uk</p>
	<p> Rula Murtada</p> <p>MSc Programmes Coordinator</p>	<p> 627 Huxley Building</p> <p> 0208 594 2843</p> <p> r.murtada@imperial.ac.uk</p>
	<p> TBC</p> <p>MSc Programmes Administrator</p>	<p> 627 Huxley Building</p> <p> 0208 594 8381</p> <p> mathsmc.administrator@imperial.ac.uk</p>
	<p> Olivia Adu-Bofour</p> <p>Student Experience Coordinator</p>	<p> 654 Huxley Building</p> <p> 020 7594 8500</p> <p> o.adu-bofour@imperial.ac.uk</p>

## English language requirement

If you are not a native English speaker you must meet the College's English language requirements.

See the Admissions website for details:

 [www.imperial.ac.uk/study/pg/apply/requirements/english](http://www.imperial.ac.uk/study/pg/apply/requirements/english)

For information on English language support available while you're here, see Centre for Academic English page 46.


## Attendance and absence

The MSc is a full year degree and you must inform the MSc administrator if you are absent from College for more than three days during the autumn, spring or summer terms, or the summer period until and including September. If the absence is due to illness you must produce a medical certificate after seven days. If you miss an examination or the deadline for any other assessment (including lab work, in class tests, coursework or presentations) due to illness or other unforeseeable and unavoidable circumstance you must follow the College's Mitigating Circumstances Policy and Procedure. Please note that all claims for mitigation must be submitted within 10 working days of the examination or assessment deadline. If you are unable to provide evidence at the time you must submit the claim and indicate what evidence will follow and when it can be provided. Claims without evidence will normally be rejected. Please see the section on mitigation below.

The Registry will be informed of all student's non-attendances as the College is obliged to report the non-attendance of students on Tier 4/Student Route visas to the Home Office.

Students are also expected to attend scheduled meetings with their Personal Tutor during Autumn and Spring terms ("Meet Your Personal Tutor" weeks). Students are expected to meet regularly (e.g., weekly) with their project supervisor during their research project. Missed appointments will be reported to the Programme Director.

If you do not engage satisfactorily with your studies, the College will consider what action is necessary to support your continued study under the Unsatisfactory Engagement Policy:

 [www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/regulations/2022x2f23/Unsatisfactory-Engagement-Policy-and-Procedure.pdf](http://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/regulations/2022x2f23/Unsatisfactory-Engagement-Policy-and-Procedure.pdf)

## Concerns and feedback

The MSc in Statistics has been running for many years, and the program team, all staff and all support services are committed to delivering a world-class teaching and learning experience. Yet, every year is different and unforeseeable circumstances can arise in your lives as in those of academic staff with teaching responsibilities and staff with support roles. The program team can only help and intervene if you contact us early, so please always reach out to your Personal Tutors, our Student Experience Coordinator or the Director (see contact details above). We are here to make this MSc a world-class and life enriching experience, and help you to get the most out of it.

## Key dates 2023–24

### Term dates

Autumn term:	30 September 2023 – 15 December 2023
Spring term:	6 January 2024 – 22 March 2024
Summer term:	27 April 2024 – 28 June 2024

### Closure dates

Christmas/New year:	23 December 2023 - 1 January 2024 (College reopens on 2 January 2024)
Easter Holiday:	28 March 2024 – 2 April 2024 (College reopens on 3 April 2024)
Early May Bank Holiday:	6 May 2024
Spring Bank Holiday:	27 May 2024
Summer Bank Holiday:	26 August 2024

### Key events

Induction Week:	2 – 6 October 2023
Election of MSc Stats Student Reps:	2 – 6 October 2023
Meet Your Personal Tutor:	2 - 6 October 2023
Meet Your Personal Tutor Week:	13 November – 17 November 2023
Examinations for Autumn Term:	First week in January 2024
Meet Your Personal Tutor Week:	22 – 26 January 2024
Release of Informal Autumn Term Results:	Last week in February/early March 2024
Meet Your Personal Tutor Week:	26 February – 1 March 2024
Examinations for Spring Term:	May 2024
Data Science Challenge:	17 May 2023
Great Exhibition Road Festival:	15 June 2024 – 16 June 2024
Meet Your Personal Tutor Week:	24 – 28 June 2024
Research Project Presentations:	3 July 2024
Statistics Summer Party:	3 July 2024
Release of Informal Spring Term Results:	Last week in July 2024
Submission of MSc Thesis:	<u>          </u> 30 August 2024

Research Project Presentations:	10 – 12 September 2024
Statistics Farewell Celebrations:	12 September 2023
Resits:	September 2024
Exam Board:	September/October 2024
Results Released by Registry:	October 2024
Graduation Ceremony:	May 2025

## 2. Programme Information

### Aims/Objectives/Learning Outcomes

Here is what you can broadly expect from the programme:

1. You will gain a thorough understanding of the probabilistic background to statistics. This will be mainly achieved through one of the core modules in term one.
2. You will master the theoretical and methodological foundations of statistics. Besides a core module, you can choose to specialise in methodological aspects of statistics through appropriate choice of optional modules in term 2 as well as through the choice of the statistical research project in term 3.
3. You will become proficient in modern computational methods for statistics. Core skills will be taught in “Computational Statistics” in term 1, with extensive opportunity to expand in the optional modules and the statistical research project.
4. You will become confident in using statistical methods to solve practical problems. Core skills will be taught in “Applied Statistics” in term 1. The optional modules in term 2 and the statistical research project will provide many opportunities to deepen this skill across a wide and diverse range of application areas.
5. You will get proficient in the statistical language R, python, and other languages.
6. You will learn to tackle, analyse and solve realistic statistical problems independently. This will be mostly achieved through the research project in term 3.

### Programme Structure

In addition to the general MSc in Statistics, five additional streams are offered: Applied Statistics, Biostatistics, Theory and Methods, Data Science and Statistical Finance. The general MSc in Statistics stream enables you to choose modules across a variety of topics, whereas the specialist streams focus on a specific theme. The formal qualification received will include the name of the specialist stream, for example: MSc Statistics (Applied Statistics). It might be possible to switch between streams at the beginning of the Spring term (or later during the academic year), but this is subject to approval by the Programme Director.

A common set of core modules in the Autumn term ensures that all students obtain advanced knowledge in the fundamental areas of probability theory, statistical inference and applied and computational statistics. A large and diverse set of optional modules is offered in the Spring term, which provides the flexibility for you to develop your own specialist interests. During the Summer term, you complete a research project with a member of academic staff on a state-of-the-art research problem that suits your interests.

## Autumn Term

<b>Week 1</b>	Induction Week
<b>Weeks 2-11</b>	Core modules: MATH70071 Applied Statistics (7.5 ECTS) MATH70093 Computational Statistics (7.5 ECTS) MATH70078 Fundamentals of Statistical Inference (7.5 ECTS) MATH70082 Probability for Statistics (7.5 ECTS)
<b>Weeks 1-11</b>	Elective modules: MATH70046 Time Series Analysis (7.5 ECTS)

## Spring Term

The modules you take will depend on which stream you are on, tables showing the combination for each stream listed below. Outside of the Core modules offered in the Autumn term, you also need to complete elective modules that equal to 30-32.5 ECTS, for example 6 modules of 5 ECTS each. This may include the elective module in the Autumn term. It is not possible to take modules that in total exceed 32.5 ECTS.

<b>Week 1</b>	Written exams for: MATH70078 Fundamentals of Statistical Inference MATH70082 Probability for Statistics
<b>Weeks 2-6</b>	Elective modules: MATH70013 Advanced Simulation Methods MATH70073 Biostatistics MATH70075 Contemporary Statistical Theory MATH70076 Data Science MATH70079 Introduction to Statistical Finance MATH70091 Machine Learning MATH70081 Nonparametric Statistics
<b>Weeks 7-11</b>	Elective modules: MATH70070 Advanced Statistical Finance MATH70090 Bayesian Methods MATH70072 Big Data MATH70092 Multivariate Analysis MATH70083 Statistical Genetics and Bioinformatics MATH70089 Stochastic Processes
<b>Weeks 1-11</b>	Elective modules: MATH70101 Deep Learning (7.5 ECTS module) MATH70134 Mathematical Foundations for Machine Learning (7.5 ECTS) MATH70048 Survival Models (7.5 ECTS module)

## Summer Term and July-September

The summer term and the summer months will focus on the final exams, capstone courseworks, a Data Science challenge, and work on the Statistical Research Project. Poster project presentations on the research projects and a summer party with all academic staff will be held in early July. Oral presentations on the research project will be shortly afterwards. The course will culminate with Farewell Celebrations.

<b>Weeks 1-3</b>	Written exams and or capstone coursework for optional modules.
<b>Weeks 4-</b>	Work on the Statistical Research Project.

## Accreditation

The MSc in Statistics is accredited by the Royal Statistical Society. The Royal Statistical Society (RSS) is one of the world's most distinguished and renowned statistical societies. It is both a learned society for statistics and a professional body for statisticians. It was founded in 1834 as the Statistical Society of London and became the Royal Statistical Society by Royal Charter in 1887. Today the Society has more than 7000 members around the world, of whom some 1500 are professionally qualified as Chartered Statistician. The RSS is active in a wide range of areas both directly and indirectly relevant to the study and application of statistics. The RSS headquarters is located at 12 Errol Street (about 50 minutes on public transport from the Department of Mathematics).

For you that means:

1. Students of the MSc in Statistics get a free one-year student membership. You are encouraged to apply for this membership and get involved in the RSS.
2. Throughout the year, the RSS organizes Ordinary Meetings, at which statistical papers are being presented and discussed. The Young Statisticians Section organizes Pre-Ordinary Meetings, held just before the Ordinary Meetings, which are aimed at giving an introduction to the area of the paper presented at the Ordinary Meeting. You might be interested in joining the RSS, attending the pre-ordinary meetings and ordinary meetings, and joining the Young Statisticians section.
3. Once graduated, the RSS will grant you "Graduate Statistician" status. This will allow you to use the postnominal designation of "Gradstat".
4. When applying for Gradstat status, the RSS needs confirmation that you are indeed a graduate. Only registry can issue such a confirmation. Please send an e-mail to [records@imperial.ac.uk](mailto:records@imperial.ac.uk), stating that a confirmation of degree should be posted to the RSS, giving the address of the RSS (if in doubt ask the RSS for the precise address).

## Core Modules

### **MATH70082 Probability for Statistics (Dr Y. Tang)**

The module Probability for Statistics introduces the key concepts of probability theory in a rigorous way. Topics covered include: the elements of a probability space, random variables and vectors, distribution functions, independence of random variable/vectors, a concise review of the Lebesgue-Stieltjes integration theory, expectation, modes of convergence of random variables, law of large numbers, central limit theorems, characteristic functions, conditional probability, and expectation. The second part of the module will focus on sequences of dependent random variables, covering aspects of discrete-time Markov chains and their key properties, including the Chapman-Kolmogorov equations, classification of states, recurrence and transience, stationarity, time reversibility, ergodicity.

Assessment: 70% written exam, 25% coursework, 5% quizzes.

### **MATH70078 Fundamentals of Statistical Inference (Prof A. Young)**

In statistical inference experimental or observational data are modelled as the observed values of random variables, to provide a framework from which inductive conclusions may be drawn about the mechanism giving rise to the data. This is done by supposing that the random variable has an assumed parametric probability distribution: the inference is performed by assessing some aspect of the parameter of the distribution.

This module develops the main approaches to statistical inference for point estimation, hypothesis testing, and confidence set construction. Focus is on description of the key elements of Bayesian, frequentist and Fisherian inference through development of the central underlying principles of statistical theory. Formal treatment is given of a decision-theoretic formulation of statistical inference. Key elements of Bayesian and frequentist theory are described, focussing on inferential methods deriving from important special classes of

parametric problem and application of principles of data reduction. General purpose methods of inference deriving from the principle of maximum likelihood are detailed. Throughout, particular attention is given to evaluation of the comparative properties of competing methods of inference.

Assessment: 75% written exam, 25% coursework.

### **MATH70071 Applied Statistics (Prof G. Yin)**

The module focuses on statistical modelling and regression when applied to realistic problems and real data. This module will explore the following classes of statistical models: Linear Models, Generalized Linear Models, Normal Linear Mixed Models. For each class of model we will look at: mathematically defining the model, estimation procedures, inference and diagnostics from both frequentist and Bayesian approaches.

Assessment: 100% coursework.

### **MATH70093 Computational Statistics (Dr A. Duncan)**

This module covers several computational methods that are key in modern statistics. Topics include Statistical computing: R programming, data structures, programming constructs, object system, graphics. Numerical methods: root finding, numerical integration, optimisation methods such as EM-type algorithms. Simulation: generating random variates, Monte Carlo integration. Simulation approaches in inference: randomisation and permutation procedures, bootstrap, Markov Chain Monte-Carlo.

Assessment: 100% coursework.

## **Choosing Elective Modules**

You must register for Spring term modules equivalent to 30-32.5 ECTS. The stream you are on will determine which elective modules are compulsory or optional. The tables below illustrate the permitted module combinations. The elective modules worth 7.5 ECTS are shared with undergraduate students from the MSci in Mathematics course, or postgraduate students from the Machine Learning and Data Science course. You can only take the 7.5 ECTS modules if you have not taken these modules (or their equivalents for undergraduate students) as part of a previous degree at Imperial.

You will have to make a final choice of elective modules once the second wave of elective modules in the Spring term is running (probably in weeks 7 or 8 of the Spring term - precise date to be announced). However, **you will be deemed to be officially registered on a module through the submission of coursework which (in total) is worth at least 15% of the final mark.** Thus, once you have reached this point in a module, you will be committed to completing the module. This is typically the case for several of the term 2 elective modules before week 7/8, please note the joining instructions and examination schedule that will be provided by module leads at the start of their modules in this regard.

What does this mean for the Time Series module running in the Autumn term? The coursework in this module is worth at most 10% of the final mark, so you will not be officially registered on this module before making your final module choice in the Spring term.

<b>General Stream</b>	
<b>Choose 30-32.5 ECTS with a maximum of two 7.5 ECTS modules</b>	
<b>5 ECTS</b>	<b>7.5 ECTS</b>
1. Advanced Simulation Methods 2. Advanced Statistical Finance 3. Bayesian Methods 4. Big Data	14. Deep Learning 15. Survival Models 16. Time Series Analysis



5. Biostatistics 6. Contemporary Statistical Theory 7. Data Science 8. Introduction to Statistical Finance 9. Machine Learning 10. Multivariate Analysis 11. Nonparametric Statistics 12. Statistical Genetics and Bioinformatics 13. Stochastic Processes	17. Mathematical Foundations for Machine Learning
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### Applied Statistics Stream

**Choose at least four modules worth at least 20 ECTS from the modules listed below. Choose any other elective modules from the General Stream for a total of 30-32.5 ECTS worth of elective modules.**

1. Advanced Simulation Methods
2. Bayesian Methods
3. Biostatistics
4. Data Science
5. Introduction to Statistical Finance
6. Machine Learning

### Biostatistics Stream

**Choose all modules worth 10 ECTS from the modules listed below. Choose any other elective modules from the General Stream for a total of 30-32.5 ECTS worth of elective modules.**

1. Biostatistics
2. Statistical Genetics and Bioinformatics

### Data Science Stream

**Choose all modules worth 15 ECTS from the modules listed below. Choose any other elective modules from the General Stream for a total of 30-32.5 ECTS worth of elective modules.**

1. Big Data
2. Data Science
3. Machine Learning

### Statistical Finance Stream

**Choose all modules worth 15 ECTS from the modules listed below. Choose any other elective modules from the General stream for a total of 30-32.5 ECTS worth of elective modules.**

1. Advanced Statistical Finance
2. Introduction to Statistical Finance
3. Stochastic Processes

### Theory and Methods Stream

**Choose at least two modules worth at least 10 ECTS from the modules listed below. Choose any other elective modules from the General stream for a total of 30-32.5 ECTS worth of elective modules.**

- Advanced Simulation Methods
- Bayesian Methods
- Contemporary Statistical Theory
- Nonparametric Statistics
- Multivariate Analysis

## Elective 5 ECTS Modules

### **MATH70013 Advanced Simulation Methods (Dr N. Kantas)**

Modern problems in statistics require sampling from complicated probability distributions defined on a variety of spaces and setups. In this module we will visit popular advanced sampling techniques, such as Importance Sampling, Markov Chain Monte Carlo, Sequential Monte Carlo. We will consider the underlying principles of each method as well as practical aspects related to implementation, computational cost, and efficiency. By the end of the module the students will be familiar with these sampling methods and will have applied them to popular models, such as Hidden Markov Models, which appear ubiquitous in many scientific disciplines.

Assessment: 100% coursework.

### **MATH70090 Bayesian Methods (Dr D. Mortlock)**

This module introduces central modern concepts in Bayesian statistical analysis. The module builds on top of the foundational aspects of Bayesian inference that were introduced in the core modules, and introduces modern Bayesian methods and modelling approaches that have become highly used across a wide range of applied data problems.

Assessment: 60% written exam, 40% weekly quizzes/in-class tests.

### **MATH70072 Big Data (Dr F. Sanna Passino)**

The emergence of Big Data as a recognised and sought-after technological capability is due to the following factors: the general recognition that data is omnipresent, an asset from which organisations can derive business value; the efficient interconnectivity of sensors, devices, networks, services and consumers, allowing data to be transported with relative ease; the emergence of middleware processing platforms, such as Hadoop, InfoSphere Streams, Accumulo, Storm, Spark, Elastic Search, ..., which in general terms, empowers the developer with an ability to efficiently create distributed fault-tolerant applications that execute statistical analytics at scale. To promote the use of advanced statistical methods within a Big Data environment - an essential requirement if correct conclusions are to be reached - it is necessary for statisticians to utilise Big Data tools when supporting or performing statistical analysis in the modern world. The objective of this module is to train statistically minded practitioners in the use of common Big Data tools, with an emphasis on the use of advanced statistical methods for analysis. The module will focus on the application of statistical methods in the processing platforms Hadoop and Spark.

Assessment: 100% coursework.

### **MATH70073 Biostatistics (Dr O. Ratmann)**

The module Biostatistics introduces central concepts in statistical analysis of biomedical data. Emphasis is placed on statistical modelling and applied data analysis on a number of case studies. Central concepts covered include causality and association; basic study designs of observational studies; basic design of clinical trials; estimation and interpretation of incidence rates, prevalence, risk ratios and number needed to treat; Bayesian hierarchical modelling; variable selection techniques; inference of causal effects from observational data; meta-analysis; analysis in the presence of missing data. Students will gain familiarity with the highly used Stan statistical computing software package for fitting statistical models. Case studies include comprehensive real-world data sets from clinical trials, observational studies on non-communicable and infectious diseases, wildfires, and pharmaceutical drug effectiveness, and are adapted each year to include examples that were noted in the news.

Assessment: 60% exam, 30% coursework, 10% weekly quizzes/in-class tests.

### **MATH70075 Contemporary Statistical Theory (Prof A. Young)**

The module provides an introduction to key ideas in contemporary statistical theory. It describes key ideas of: high-dimensional statistics, including multiple testing and inference under sparsity assumptions; higher-order distributional approximation methods, including parametric and non-parametric bootstrap, analytic methods; objective Bayes inference; key concepts and methods of selective inference.

Assessment: 70% exam, 20% coursework, 10% weekly quizzes/in-class tests.

### **MATH70076 Data Science (Dr Z. Varty)**

Data scientific methods are wide in scope, drawing equally from statistics and computer science. This module will cover computing with data, producing reproducible workflows, preparing messy real-world datasets, performing exploratory data analysis and presenting data via data visualisation techniques. In addition, it will cover the science in data science, exploring what data analysts really do, thinking critically about appropriate uses and misuses of data science.

Assessment: 100% coursework.

### **MATH70079 Introduction to Statistical Finance (Dr A. Luati)**

The module introduces fundamental concepts in financial economics and quantitative finance and presents suitable statistical tools which are widely used when analysing financial data. The module will start off with an introduction to risk-neutral pricing theory followed by a primer on risk measures such as value at risk and expected shortfall which are widely used in financial risk management. Next, an introduction to time series analysis will be given, where the focus will be on so-called ARMA-GARCH processes. Such processes can describe some of the stylised facts widely observed in financial data, including non-Gaussian returns and heteroskedasticity. Finally, methods for forecasting financial time series will be introduced.

Assessment: 70% written exam, 30% coursework.

### **MATH70070 Advanced Statistical Finance (Dr M. Pakkanen)**

The module will first introduce the basics of extreme value theory, which will be used to develop models and estimation methods for extremes in financial data. The second part of the module will provide a concise introduction to the theory of stochastic integration and Itô calculus, which provide a theoretical foundation for volatility estimation from high-frequency data using the concept of realised variance. The asymptotic properties of realised variance will be elucidated and applied to draw inference on realised volatility. The third part introduces some recently developed volatility forecasting models that incorporate volatility information from high-frequency data and demonstrates how the performance of such models can be assessed and compared using modern forecast evaluation methods such as the Diebold-Mariano test and the model confidence set. The final part of the module provides an overview of covariance matrix estimation in a high-dimensional setting, motivated by applications to variance-optimal portfolios. The pitfalls of using the standard sample covariance matrix with high-dimensional data are first exemplified. Then it is shown how shrinkage methods can be applied to estimate covariance matrices accurately using high-dimensional data.

Assessment: 80% written exam, 20% coursework.

### **MATH70091 Machine Learning (Dr S. Filippi)**

This module will provide an introduction to statistical machine learning. The lectures will focus on a variety of useful techniques including methods for regression, classification, feature extraction, dimensionality reduction, and data clustering. State-of-art approaches such as Random Forest, Neural networks, kernel methods and Gaussian processes will be

introduced. Real-world applications will illustrate how the techniques are applied to real data sets.

Assessment: 100% coursework.

### **MATH70092 Multivariate Analysis (Dr A. Duncan)**

Multivariate Analysis is concerned with the theory and analysis of data that has more than one outcome variable at a time, a situation that is ubiquitous across all areas of science. Multiple uses of univariate statistical analysis is insufficient in this setting where interdependency between the multiple random variables are of influence and interest. In this module we look at some of the key ideas associated with multivariate analysis. Topics covered include multivariate notation, the covariance matrix, multivariate characteristic functions, a detailed treatment of the multivariate normal distribution including the maximum likelihood estimators for mean and covariance, the Wishart distribution, Hotelling's  $T^2$  statistic, likelihood ratio tests, principle component analysis, ordinary, partial and multiple correlation, multivariate discriminant analysis.

Assessment: 75% written exam, 10% coursework, 15% weekly quizzes/in-class tests.

### **MATH70081 Nonparametric Statistics (Dr K. Ray)**

Nonparametric methods use flexible approaches to provide inference under weaker assumptions than conventional parametric methods. In this module, students will consider a variety of problems, such as estimating distribution functions, density estimation and nonparametric regression. Topics covered may include the empirical distribution function, histograms, kernel-based estimators, local polynomial regression, splines and wavelet estimators. A key concept throughout will be the bias-variance tradeoff, which governs the tuning and performance of all such methods.

Assessment: 70% written exam, 20% coursework, 10% weekly quizzes/in-class tests.

### **MATH70083 Statistical Genetics and Bioinformatics (Dr M. Evangelou)**

Advances in biotechnology are making routine use of DNA sequencing and microarray technology in biomedical research and clinical use a reality. Innovations in the field of Genomics are not only driving new investigations in the understanding of biology and disease but also fuelling rapid developments in computer science, statistics, and engineering to support the massive information processing requirements. In this module, students will be introduced into the world of Statistical Genetics and Bioinformatics that have become in the last 10-15 years two of the dominant areas of research and application for modern Statistics. \_-

In this module we will develop models and tools to understand complex and high-dimensional genetics datasets. This will include statistical and machine learning techniques for: multiple testing, penalised regression, clustering, p-value combination, dimension reduction. The module will cover both Frequentist and Bayesian statistical approaches. In addition to the statistical approaches, the students will be introduced to genome-wide association and expression studies data, next generation sequencing and other OMICS datasets.

Assessment: 100% coursework

### **MATH70089 Stochastic Processes (Prof P. Ernst)**

A stochastic process is a statistical model for describing phenomena that evolve dynamically in a random manner over time. This module will cover aspects of continuous-time stochastic processes, with a focus on theory, and with some computation. Various classes of stochastic processes will be considered, but the Wiener process and diffusions will be emphasised. Multiple applications to statistical finance will also be presented.

Assessment: 80% written exam, 20% coursework.

## Elective 7.5 ECTS Modules

### **MATH70101 Deep Learning (Dr K. Webster)**

This module teaches the building blocks of deep learning models, and how to design network architectures for specific applications, in both supervised and unsupervised contexts. It covers practical skills in implementing neural networks in the popular deep learning library TensorFlow. Students will learn how to build, train and evaluate networks using this framework. In the latter part of the module, the focus is on probabilistic deep learning models, such as normalising flows and variational autoencoders (VAEs).

Assessment: 100% coursework.

### **MATH70134 Mathematical Foundations for Machine Learning (Dr A Borovykh)**

Machine learning techniques such as deep learning have recently achieved remarkable results in a very wide variety of applications such as image recognition, self-driving vehicles, partial differential equation solvers, trading strategies. However, how and why the recent (deep learning) models work is often still not fully understood. In this course we will begin with a general introduction into machine learning and continue to deep learning. We will focus on better some observed phenomena in deep learning aiming to gain insight into the impact of the optimization algorithms and network architecture through mathematical tools.

Assessment: 100% coursework.

### **MATH70048 Survival Models (Dr H Battey)**

Survival models are fundamental to analysing the occurrence of events, in particular when event times are subject to censoring, which means that sometimes the event time is not known, but it is only known that the event has not occurred in a given time interval. This is common in many areas, including clinical trials and in the actuarial field. This module will introduce key ideas and models, including lifetime distributions, censoring, parametric models, non-parametric estimators (Kaplan-Meier estimator), semi-parametric models (Cox proportional hazards models), as well as multistate models. An introduction to the counting process approach for analysing these models will also be given.

Assessment: 90% written exam, 10% coursework.

### **MATH70046 Time Series Analysis (Dr E Cohen)**

A time series is a series of data points indexed and evolving in time. Importantly, we cannot assume the observations are independent from one another and, in fact, they are often significantly correlated. They are prevalent in many areas of modern life, including science, engineering, business, economics, and finance. This module is a self-contained introduction to the analysis of time series. Weight is given to both the time domain and frequency domain viewpoints, and important structural features (e.g., stationarity, invertibility) are treated rigorously. Attention is given to modelling, estimation and prediction (forecasting), and useful computational algorithms and approaches are introduced.

Assessment: 90% written exam, 10% coursework

## The Statistical Research Project

### **Allocation of supervisors**

Early in the Spring term a list of supervisors, external industry partners, and projects offered will be made available to students. The list will describe the general area of research and/or

the research topics, with the expectation that students and supervisor will later agree on details and specific milestones that match their interests.

Information sessions will be held in the early Spring term for students to meet supervisors and ask any further questions about the projects on offer.

Shortly after, students will be asked to submit their preferred area of research for their project (Statistical Theory and Methods, Applied Statistics, Biostatistics, Data Science or Statistical Finance), and list their preferred supervisors. If a student is in a particular programme stream, then their choice of research area must match their stream.

A marriage algorithm will determine the allocation of the students to the supervisors, taking into account the students' performances in the core modules and the supervisors' preferences. Students will be allocated a research project in their preferred stream, and as much as possible to one of their preferred supervisors/external industry partners.

We aim to announce the allocation as soon as possible and before the end of the Spring term. Before the end of the Spring term, students and supervisors will have their first meeting to discuss the project, related datasets, and publications.

Students with a strong desire to work on a specific topic may wish to approach academic members of staff in the Statistics Section, outside the Statistics Section, or industry partners to discuss potentially working together on that topic. **Any such arrangement must be finalised by the end of week 1 in January.** Students will be invited to an information session in the Autumn term about project options with external partners. More information about the research interests of the members of the Statistics Section can be found at <https://www.imperial.ac.uk/statistics/research/>.

## Working on the project

The purpose of the project is to train and test your ability to work independently on an advanced topic in statistics, and to a high professional standard.

The work on the project is done under the direction of the project supervisor, who need not be your Personal Tutor. All research projects will have a supervisor from within the Statistics section **who holds the final responsibility over the research project, including for those projects with external partners.** The supervisor(s) will give general guidance on the work for the project and the writing of the thesis, while point-to-point guidance or debugging of your code cannot be expected.

Students should begin initial scoping work on their research project as soon as the topic is allocated. Aim to meet your supervisor before the Easter break to agree on broad project aims, identify primary literature, and agree on steps needed to ensure access to data.

You are expected to work full-time on the research project after the assessments for the elective modules are completed, as the MSc in Statistics is a full-year course. During the Summer term, immediately after the assessments for the elective modules, the specific milestones of the research project should be defined and refined.

You can expect regular meetings with your supervisor, on average one hour every two weeks over the entire period of your research project. After the Summer term, you can only expect less frequent meetings. It is a good practice to keep minutes of your meetings and to share the notes with your supervisor(s) after each meeting. For fruitful supervisory meetings, it is recommended that you have an agenda prepared for each meeting that you work through with your supervisor, which will typically make your meetings more fruitful for a successful project. Continued documentation of your work is good practice, and it will help greatly when the final thesis is being prepared.

## Project Milestones

There are three milestones. A poster presentation of your research project in early July. This is a compulsory, but non-assessed part of the course. The second milestone is the submission of the thesis (written report) that counts for 90% of the overall research project mark. The final milestone is the oral presentation of the project that counts for 10% of the overall research project mark. Further details of the three milestones can be found below. The dates of these milestones are listed in the Key Dates section.

## Poster Presentation

In early July, you will present a poster on your research project. This is an excellent opportunity to get feedback, both from academic researchers and members of staff as well as from your fellow students on the initial stages of your research. The poster should clearly state and describe the underlying question and the scope of your project. It may very well be that you cannot present any results of your own yet, but you may want to address what results you hope to achieve. An information session with further details, including templates, will be held at the beginning of the Summer term.

## The Thesis

The thesis is a full report on your statistical research project and the original work conducted, which must be submitted electronically by the date listed in the Key Dates section via the Virtual Learning Environment (Blackboard). Late submission may be penalised and will normally delay consideration of the thesis to the following year.

The thesis should be on A4-sized paper, typed using a LaTeX template that will be shared with the students, and follow the template structure. Students must follow the Imperial College guidelines on academic integrity, and include in the thesis and sign the declaration “The work contained in this thesis is my own work unless otherwise stated”. Additional guidance that will be provided to you during an information session in the Summer term.

You are strongly advised to pass a first draft of the thesis to the supervisor(s) a month before the submission deadline. Advice on overall presentation, focus, and clarity can be expected where advice on revised versions, spelling, grammar, or the suitability of particular sections of the thesis cannot be expected.

## Oral Presentation

An integral part of the project will be an oral presentation that will train you in conveying the main ideas and results in your highly specialised work on the summer project to a general statistical public, as well as further your communication and delivery skills. It will usually take place shortly after the submission deadline of the thesis, precise dates are listed in the Key Dates section.

## Computing

The Department of Mathematics has several research computing resources - discuss with your supervisor if you need to use those. Visit these links for an overview:  
<https://www.imperial.ac.uk/mathematics/for-staff/research-computing-support/>  
<https://www.imperial.ac.uk/admin-services/ict/self-service/research-support/rcs/>

## Marking Guidelines

All marking guidelines will be available on Blackboard.

## Further Elements of the Course

### Stats clinics

The Curriculum further includes regular 1-hour long revision sessions ahead of important deadlines and to facilitate learning. The Stats clinics are run by graduate teaching assistants on a Q&A basis and are your main opportunity to obtain professional help beyond the Office Hours. Topics covered include revision of preliminary material, revision of R and LaTeX, an introduction to python, advanced concepts in python in preparation of several elective modules, exam preparation, as well as review of the content covered in the core module in Autumn term. Attend these sessions as needed.

### Careers in Statistics events

The curriculum includes a variety of career events in which professional statisticians provide insights into their career, tips for next steps and applications, and an overview of the many professional opportunities available to statisticians in industry, with NGOs, in administration and government, and in academia. Attendance is strongly encouraged.

### The Statistics Research Seminar

The Statistics Section organizes regular research seminars. Attendance is strongly encouraged. Speakers are specifically instructed to “start gently”, to allow MSc students to follow parts of the talks. Seminars are advertised by email and at:

<http://www.imperial.ac.uk/statistics/seminars/statistics-seminar/>

### Professional Skills Development

Working as a practical statistician will involve several transferable skills, a lot of these will be trained during the year. As part of the course, you will train your teamworking abilities through multiple group activities. You will train your problem-solving skills throughout the course. In particular, it is very important that you work through the problem sheets that you will be given in preparation of the assessments. Furthermore, the project will enable you to work thoroughly on a major problem. Presentation skills are very important for your future career. You will have the opportunity to train these in the presentation of your project and oral examinations. Furthermore, some lecturers may require you to present your coursework.

More information on improving and acquiring such skills can be found at:

<https://www.imperial.ac.uk/careers/applications-and-interviews/presentations/>



## Imperial Mobile app

Don't forget to download the free Imperial Mobile app for access to College information and services anytime, anywhere, including your programme timetable, College emails and a library catalogue search tool.

 [www.imperial.ac.uk/imperialmobile](http://www.imperial.ac.uk/imperialmobile)

## Welcome to Imperial app

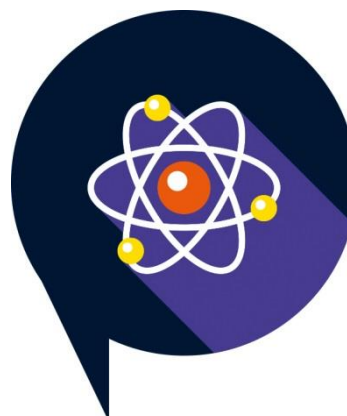
The College has a Welcome to Imperial app which contains important information about campus operations, aspects of student life, a schedule of welcome activities and information about life in halls. All new students should download this guide to ensure they have the most up to date information and event schedule for the start of term.

You can download the App from the Apple or Google App Stores.

## Imperial Success Guide

The Imperial Success Guide is an online resource with advice and tips on the transition to Master's level study. More than just a study guide, it is packed with advice created especially for Imperial Master's students, including information on support, health and well-being and ideas to help you make the most of London.

 [www.imperial.ac.uk/success-guide](http://www.imperial.ac.uk/success-guide)



### 3. Assessment

The MSc in Statistics programme specification can be found on the course website, along with the competency standards for all taught mathematics masters programmes.

<https://www.imperial.ac.uk/mathematics/postgraduate/msc/>

The entire MSc course will be worth 90 ECTS. It consists of two elements. The first element consists of the taught modules and is worth 60 ECTS. The second, the summer research project, is assigned 30 ECTS.

#### Taught components

##### MSc in Statistics modules

The MSc modules will be assessed through a suitable range of approaches, such as courseworks, group assessments, quizzes, and written examinations. Written exams will either take place in the first week of the Spring term or at the beginning of the summer term. 7.5 ECTS modules will normally be examined by a 2-hour exam and 5 ECTS modules by a 1.5-hour exam.

The raw marks from each assessment will be weighted and combined to produce a raw module mark; the raw module mark will then be converted to a 0-100 scale. Due to the nature of Statistics as an academic discipline it is often necessary for module marks to be scaled in order to ensure comparability across all MSc modules and so that they map appropriately onto the postgraduate degree classification system. In accordance with the Regulations for Taught Programmes of Study, this process is applied consistently to all students taken each module and reported to External Examiners and the Board of Examiners.

Based on students' performances in the module assessments, the module lecturers decide what they consider to be the pass / fail boundary (P), the Pass/Merit Boundary (T), the Merit/Distinction Boundary (E) and the maximum mark (M) which was realistically possible for the module. For the MSc modules the raw marks P, T, E and M are mapped to 50, 60, 70 and 100 respectively (with 0 being mapped to 0). These choices of grade boundaries (PTM) are compared by a sub-Board of the Board of Examiners (the MSc Liaison Panel) and further adjustments are made to ensure comparability of marks across modules. The MSc Liaison Panel meets twice during the academic year, beginning of the Spring term and end of the summer term. The Liaison panel reviews the distribution of each individual module and compares it to the other modules - this is essential given the wide variation in elective modules offered at the MSc in Statistics. Once the values of the grade boundaries for a module have been finalised, an individual raw mark is then mapped to the 0–100 scale by linear interpolation and this becomes the student's mark for that module. The External Examiner may recommend modifications to the mapping when they consider the scaled marks for each individual module and all students. A postgraduate student is required by College to obtain 50% (college scale) to pass these modules.

##### Undergraduate modules

For modules run by the undergraduate teaching system (Mathematical Foundations for Machine Learning, Time Series, Survival Models) the marks are calibrated and moderated together with the undergraduate students.

When sitting exams for these modules there will be a 5th "mastery" question that MSc and the M4 (4th year) undergraduate students are required to take on top of the other four questions. This will be harder than the other 4 questions. Students will be given an extra half an hour for this question (M3 students have 2hrs for the whole exam, MSc and M4 students have 2.5hrs for the exam) and it has the same mark weighting as questions 1-4.

The marks for the entire group of students (undergraduate and postgraduate) sitting the module are collated and then scaled and converted to the College Scale as a whole (details can be found undergraduate handbook). A postgraduate student is required by College to obtain 50% (college scale) to pass these modules.

## **MLDS modules**

For modules run by the MLDS module Deep Learning the marks are calibrated and moderated together with the MLDS students. A postgraduate student is required by College to obtain 50% (college scale) to pass this module.

## **Project**

The second course element, the project, will be examined through the thesis and the oral presentation (see above).

The thesis will be judged on the quality of the work it describes, rather than the quantity of pages; excess length disproportionate to the content may be penalised. Point by point marking schemes will be shared with you at the beginning of the Summer term. The thesis is worth 90% of the project mark and includes a 10% mark for student initiative.

Students must submit a thesis, a written report of original work as described above, worth 90% of the project mark. In addition students must deliver an oral presentation on their research project, worth 10% of the project mark. The thesis must be submitted by the deadline specified in the Key Dates section.

The presentation and your responses during a brief Q&A will be assessed and contribute 10% to the statistical research project mark.

Point-by-point marking criteria and additional guidance on the thesis and oral presentation will be provided to you during information sessions in the Summer term.

## **Degree Classifications**

MSc degrees are awarded once each year, following the Board of Examiners' Meeting; see the Key Dates. In line with usual practice, the MSc in Statistics has an external examiner, meaning an examiner external to the university whose main role it is to uphold standards and to ensure that the assessment process is fair and rigorous. More details of the role of the external examiner are available below.

### **Programme Weightings:**

Degree classification is based on assessment results from each of the modules and the project mark (each of these assessment results is on the 0-100 scale). The results from the taught part of the programme that comprises the core and elective modules are combined following the programme weightings below to produce the weighted average mark for the taught components and which is used for the purpose of degree classification.

Module	%
Probability for Statistics	8.33%
Fundamentals of Statistical Inference	8.33%
Applied Statistics	8.33%
Computational Statistics	8.33%
Elective modules to the value of 30-32.5 ECTS. Each module weighted in proportion to	33.33%
Statistics Research Project	33.33%

### **Award of the MSc in Statistics Degree**

To qualify for the award of the MSc in Statistics a student must have:

1. accumulated credit to the value of no fewer than 90 credits at level 7 or above of which no more than 15 credits may be from credit level 6;
2. and no more than 15 credits as a Compensated Pass.

For the specialisation streams a student must have met the specific requirements of their chosen specialisation as outlined above.

### **Classification of Postgraduate Taught Awards**

The College sets the class of Degree that may be awarded as follows:

Distinction: A Distinction mark (70.00% or above) must be met separately in:

- a. the weighted average mark across the taught part of the programme that comprises the core and elective modules,
- b. and additionally in the Statistics research project.

Merit: A Merit mark (from 60.00% to less than 70.00%) must be met separately in:

- a. the weighted average mark across the taught part of the programme that comprises the core and elective modules,
- b. and additionally in the Statistics research project.

Pass: A Pass mark (from 50.00% to less than 60.00%) must be met separately in:

- a. the weighted average mark across the taught part of the programme that comprises the core and elective modules,
- b. and additionally in the Statistics research project.

Overall weighted averages 0.5% from the degree borderlines will be automatically rounded up in accordance with item 13.19 in the 2020-2021 regulations. The board of examiners will consider other borderline cases, as they are defined in items 13.20–13.22 of the Regulations for Taught Programmes of Study 2020-2021.

### **Exit Degree: Award of the Postgraduate Diploma in Statistics (PG Dip)**

To qualify for the award of the PG in Statistics a student must have passed:

- a. Accumulated credit from modules to the value of no fewer than 60 credits at Level 7 (this may include a maximum of 15 credits from Level 6 where this is approved as part of the award);

- b. and no more than 10 credits as a Compensated Pass;

The Postgraduate Diploma in Statistics is an exit award that may be offered at the discretion of the Board of Examiners and is not available for entry.

## Release of Results

The exam board, which will take place after the course has finished, will have final authority to decide your results. This board will, among other things, consider borderline cases and take mitigating circumstances into account. You will receive your final results from registry in October/November (after your course has finished).

During the year, you will receive indications of your performance in the various courses you have taken – these are provisional and subject to confirmation by the exam board. Specifically, in Blackboard, under the “course” MSc in Statistics, you will find indications of your results on the College Scale (under “My Grades”). The following code will be used:

A+	high distinction (80,100)
A	distinction range(70,80)
B+	in the merit range (65,70)
B-	in the merit range(60,65)
C+	in the pass range (55,60)
C-	in the pass range (50,55)
D	in the fail range (40,50)
F	Bad fail (<40)

**Please note** that the D mark is considered condoned pass. As such, where a student has been awarded a compensated pass, they cannot re-attempt that module unless they are required to (see Award of the MSc in Statistics degree above).

[https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/regulations/2022x2f23/Regulations\\_for\\_Taught\\_Programmes\\_2022\\_23.pdf](https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/regulations/2022x2f23/Regulations_for_Taught_Programmes_2022_23.pdf)

## Past exam papers

Past examination papers will be made available for exam-based modules, usually on the module page on Blackboard, our Virtual Learning Environment.

For modules which are shared with BSc/MSci students of the Undergraduate Mathematics program, past exam papers are available on Blackboard Maths Central in Examinations Information section.

The College has policies and procedures to support the setting, sitting, marking and moderation of all assessment. These can be found within the Regulations and College Policies at:

[www.imperial.ac.uk/about/governance/academic-governance/regulations/](https://www.imperial.ac.uk/about/governance/academic-governance/regulations/)

[www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/](https://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/)

## Instruction to Candidates for Examinations

Students who are candidates for examinations are asked to note that all examinations are conducted in accordance with the College Regulations. The relevant set of regulations will depend on your programme and year of entry, please see our Regulations webpage to determine which apply to you:



[www.imperial.ac.uk/about/governance/academic-governance/regulations/](http://www.imperial.ac.uk/about/governance/academic-governance/regulations/)

Instructions for exam candidates can be found here:



[www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/exam-arrangements-and-re-sits/Instructions-to-candidates-for-examinations.pdf](http://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/exam-arrangements-and-re-sits/Instructions-to-candidates-for-examinations.pdf)

## Academic Integrity and Academic Misconduct

**Academic integrity is fundamental to learning, teaching and research** and it is important to understand what it means you and the international community of research that you are joining. You will be taught the concept of academic integrity and how you can ensure that any work that you complete conforms to these principles, now and in the future. This means that your work acknowledges the ideas and results of others, that it is conducted in an ethical way and that it is free from plagiarism.

**Conversational/Generative AI Tools** are increasingly widely used in professional Statistics. As this MSc aims to prepare you for a career in Statistics, the use of these tools are not banned but must at all times be fully disclosed and cited following international referencing standards.

Training will begin in the Induction week and is mandatory to complete. Further information is available at



<https://www.imperial.ac.uk/about/leadership-and-strategy/provost/vice-provost-education/generative-ai-tools-guidance/>

**Academic misconduct** is the attempt to gain an academic advantage, whether intentionally or unintentionally, in any piece of assessment submitted to the College. This includes plagiarism, self-plagiarism, collusion, exam offences or dishonest practice.

All assessments are routinely checked for academic misconduct, and commensurate penalties apply according to the seriousness of the offence. Penalties include informal warnings for minor offences, and setting module marks to zero, no award of degrees and exit degrees, and rescinding awarded degrees for serious offences. **It is always in your best interest** to report academic misconduct that you observe, or following the heat of a deadline to self-report any concerns on academic integrity of our own work, as this may substantially lower the seriousness of the offence.

Full details of the policy can be found at:



[www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/plagiarism-academic-integrity--exam-offences/](http://www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/plagiarism-academic-integrity--exam-offences/)

Definitions of the main forms of academic misconduct can be found below:

**Plagiarism** is the presentation of another person's thoughts, words, images, research or diagrams as though they were your own. Another form of plagiarism is self-plagiarism, which involves using your own prior work without acknowledging its reuse. Plagiarism may be

intentional, by deliberately trying to use another person's work by disguising it or not citing the source, or unintentional where citation and/or referencing is incorrect.

Plagiarism must be avoided, with particular care on coursework, essays, reports and projects written in your own time but also in open and closed book written examinations. You can support your understanding of proper referencing and citation by using the resources available from the College such as the Library learning support webpages at:

 [www.imperial.ac.uk/admin-services/library/learning-support/plagiarism-awareness/](http://www.imperial.ac.uk/admin-services/library/learning-support/plagiarism-awareness/)

For group work, all members have responsibility for the integrity of the work submitted. Therefore, if plagiarism (or another form of academic misconduct) is proven, all group members may be liable for any penalty imposed.

The College requires you to complete mandatory training on plagiarism awareness. You can access this training online via the Graduate School's website.

 [www.imperial.ac.uk/students/academic-support/graduate-school/students/masters/professional-development/plagiarism-online/](http://www.imperial.ac.uk/students/academic-support/graduate-school/students/masters/professional-development/plagiarism-online/)

TurnitinUK is an online text matching service which assists staff in detecting possible plagiarism. The system enables institutions and staff to compare students' work with a vast database of electronic sources. Your programme team will explain how it is used in your programme

 [www.imperial.ac.uk/admin-services/ict/self-service/teaching-learning/turnitin/](http://www.imperial.ac.uk/admin-services/ict/self-service/teaching-learning/turnitin/)

**Collusion** describes work that has been conducted by more than one individual, in contravention of the assessment brief. Where it is alleged that there has been collusion, all parties will be investigated initially under the Academic Misconduct procedure.

You should note that whilst the College encourages students to support each other in their studies you should be careful to ensure that you do not exceed any assessment brief with regards to individual work, always acknowledge the contributions of others in your work, and do not leave yourself open to allegations that you have supplied answers to enable another student to commit academic misconduct.

**Exam offences** fall into two categories. These are offences that may be disruptive in the exam venue or those that are considered an attempt to cheat. Examples of disruptive behaviour includes causing a disturbance in the exam room, having an electronic device that has not been fully turned off or talking in the exam room. Behaviour that may be considered an attempt to cheat includes bringing unauthorised material into an exam (such as notes, unauthorised books or other material), attempting to communicate with others apart from the invigilator, or trying to remove examination material without permission. You must ensure that you follow all reasonable instructions of the invigilators.

**Dishonest practice** is the most serious category under the procedure. Examples of dishonest practice include bribery, contact cheating (buying work from an essay mill (which is illegal in the UK) or other individual to submit as your own), taking an exam for someone else or getting someone else to take an exam for you, attempting to access exam papers before the exam, making a false claim for mitigating circumstances or providing fraudulent evidence, falsifying documentation or signatures in relation to assessment or a claim for mitigating circumstances.

## 4. Board of Examiners

### Board of Examiners

Lecturers from the [Statistics Section](#).

 Dave Woods, University of Southampton

An External Examiner is normally an experienced member of academic staff from another Higher Education Institution who acts as a critical friend to your programme of study. For some programmes, one of the External Examiners could be an industry expert to provide the professional expertise needed to support the programme. External examining is an essential part of the College's quality assurance and enhancement process, ensuring that academic standards are maintained. The knowledgeable and independent views of external examiners are invaluable in certifying that the College's awards are appropriate and comparable as well as highlighting good practice and potential areas of enhancement.

During your programme you may be invited to meet your external examiners to discuss how you have found the. It is not appropriate however, for you to seek to submit complaints or representations directly to external examiners or to seek to influence them other than by giving feedback in a meeting. Inappropriate communication towards an examiner would make you liable for disciplinary action. If there is a specific issue that needs to be resolved, please see the Student Complaints Policy and Procedure.

A summary of External examiners reports from the previous academic year can be found here:

 [www.imperial.ac.uk/about/governance/academic-governance/academic-policy/external-examining/](http://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/external-examining/)



## 5 Location and Facilities

Imperial has a number of campuses in London and the South East. All have excellent travel links and are easily accessible via public transport.

### Your main location of study will be:



South Kensington Campus  
Huxley Building, 180 Queens Gate, SW7 2AZ London

### Facilities

- MSc Computer/Common Room – 215 Huxley (level 2)
- Maths Learning Centre – 416 Huxley (level 4) (contains 64 computers, two study desks fitted out with audio-visual facilities for project presentations, two printers and a range of additional study areas)
- MSc Silent Study Room – 413 Huxley (level 4).
- The MSc Administrator office is located at 652 Huxley.
- Lockers - There is a (limited) number of lockers on Level 1 of the Huxley building. For availability contact Martin Cooper [martin.cooper@imperial.ac.uk](mailto:martin.cooper@imperial.ac.uk)

### Library Services

The Central Library at South Kensington is open 24 hours for study space, and further space is available to all students in GoStudy on levels 4 and 5 of the Chemistry Building.

Make sure you find out who your subject librarian is as they'll be able to help you find books and online resources for your assignments. Also, don't forget to check out the Library's range of training workshops and our other campus libraries for access to specialist medicine and life sciences resources. You can borrow up to 40 books and, whether you're working on or off site, you'll be able to access e-books, e-journals and databases from our collection of almost 400,000 titles. If we don't have what you need, we can get it for you, simply ask us to buy it or request a copy through our free Document Delivery service.

For any questions our staff will be happy to help, simply chat with us online or contact us via email, phone or social media, just check our website for details:

 [www.imperial.ac.uk/library](http://www.imperial.ac.uk/library)

### Maps

Campus maps and travel directions are available at:

 [www.imperial.ac.uk/visit/campuses](http://www.imperial.ac.uk/visit/campuses)

### Accessibility

Information about the accessibility of our South Kensington Campus is available online through the AccessAble access guides:

 [www.accessable.co.uk/organisations/imperial-college-london](http://www.accessable.co.uk/organisations/imperial-college-london)

## Smoke-Free Policy

All Imperial campuses and properties are smoke-free. This means that smoking by staff, students or visitors is not permitted on or within 20 metres of College land. The policy covers all College properties, including student accommodation and sports grounds.

 [www.imperial.ac.uk/smoke-free](http://www.imperial.ac.uk/smoke-free)

## SafeZone

SafeZone is a College app through which you can quickly and directly contact the Security team whenever you need them. Whether you're in an emergency situation, in need of First Aid or want to report an incident on campus, SafeZone allows you to be immediately put in touch with a member of our Security team and, at the touch of a button, can share your location and personal profile so that they can respond quickly and effectively to your specific needs. It also allows the entire College community to stay informed in the event of a major incident in London or wherever you may be in the world. Safezone also provides information on other services, such as real-time updates on the College shuttle bus.



SafeZone is optional to register for and is now available to download on the Apple and Android App stores. Visit <http://www.imperial.ac.uk/campus-security/safezone> [www.imperial.ac.uk/estates-facilities/security/safezone/](http://www.imperial.ac.uk/estates-facilities/security/safezone/) for more details about SafeZone.

All existing phone numbers for the Security team are still operational. In the event of an emergency, you can still call 4444 from any internal College phone. In the event of a wider incident in London, you can now also call 0300 131 4444, Imperial's Emergency Recorded Message Line, which will point you in the direction of up-to-date information and advice.

## Changes due to Coronavirus (COVID-19)

The College will keep you informed about any further changes that may affect you due to the impact of coronavirus (COVID-19). The COVID-19 FAQs on the website are a repository of helpful information and the latest guidance can be found at:

 [www.imperial.ac.uk/about/covid-19/](http://www.imperial.ac.uk/about/covid-19/)

## 6. Working While Studying

If you are studying full time, the College recommends that you do not work part-time during term time. If this is unavoidable we advise you to work no more than 10–15 hours per week, which should be principally at weekends and not within normal College working hours.

Working in excess of these hours could impact adversely on your studies or health.

If you are here on a Tier 4/Student Route visa you can work no more than 20 hours a week during term time. Some sponsors may not permit you to take up work outside your studies and others may specify a limit.

If you are considering part-time work during term time you are strongly advised to discuss this with your supervisor or Personal/Senior Personal Postgraduate Tutor. If you are on a Tier 4/Student Route visa you should also seek advice from the International Student Support team regarding visa limitations on employment.

The College's examination boards will not normally consider as mitigating circumstances any negative impact that part-time work during term-time may have had on your performance in examinations or in other assessed work. Examinations or vivas cannot be rescheduled to accommodate your part-time working arrangements.

## 7. Health and Safety

Keeping you safe is a top priority for us. Since 1 April 2022, the UK Government removed all restrictions on public areas, including Universities and education settings. Imperial College London still encourages students to wear face coverings in crowded areas, to get fully vaccinated, to cover your coughs and sneezes, and to respect others' personal space. All staff and students are advised to stay at home if you are feeling ill or have any symptoms of respiratory disease.

The latest Imperial College guidance to students can be seen at:


 [www.imperial.ac.uk/about/covid-19/](http://www.imperial.ac.uk/about/covid-19/)


The College's Health and Safety Policy can be found at:


 [www.imperial.ac.uk/safety/safety-by-topic/safety-management/health-and-safety-policy-statement/](http://www.imperial.ac.uk/safety/safety-by-topic/safety-management/health-and-safety-policy-statement/)

 [www.imperial.ac.uk/safety/safety-by-topic/safety-management/health-and-safety-policy-statement/](http://www.imperial.ac.uk/safety/safety-by-topic/safety-management/health-and-safety-policy-statement/)

### Your Departmental safety contact is:

 Martin Cooper

 131 Huxley, Level 1

 0207 594 8544

[martin.cooper@imperial.ac.uk](mailto:martin.cooper@imperial.ac.uk)

You may be required to complete inductions and attend training sessions to safely complete this course.

There is also a wide range of [eLearning micro-learning modules](#) focused on specialised topics and designed to raise awareness of hazards and control measures for working safely in hazardous areas (i.e., laboratories and workshops) across the College.

### The College Safety Department

The [Safety Department](#) offers a range of [specialist advice](#) on all aspects of safety. This includes anything which you feel might affect you directly, or which may be associated with teaching, research or support service activities.

The College's activities range from the use of hazardous materials ([biological agents](#), [chemicals](#), [cryogenes](#), [gases](#) and [ionising/non-ionising radiation](#)) to field work, heavy or awkward lifting, driving, and working alone or late.

All of the College's activities are covered by general health and safety regulations, but higher risk activities will have additional requirements.

The Safety Department helps departments and individuals ensure effective safety management systems are in place throughout the College to comply with specific legal requirements.

Sometimes the management systems fail, and an accident or a near-miss incident arises; it is important that we learn lessons from such situations to prevent recurrence and the Safety

Department can support such investigations. All accidents and incidents should be reported online at:

 [www.imperial.ac.uk/safety/safety-by-topic/accidents--incidents/](http://www.imperial.ac.uk/safety/safety-by-topic/accidents--incidents/)

To report concerns or to ask for advice you should contact your programme director, academic supervisor or departmental safety officer in the first instance. You may also contact the [Safety Department](#) directly.

### **Occupational Health Requirements**

The College Occupational Health Service provides services to:

- protect health at work
- assess and advise on fitness for work
- ensure that health issues are effectively managed

The Service promotes and supports a culture where the physical and psychological health of staff, students and others involved in the College is respected, protected and improved whilst at work.

 [www.imperial.ac.uk/occupational-health](http://www.imperial.ac.uk/occupational-health)

## **8. College Policies and Procedures**

### **Student Academic Regulations**


All registered students of the College are subject to the College Regulations. The relevant set of regulations will depend on your programme and year of entry, please see our Regulations webpage to determine which apply to you:

 [www.imperial.ac.uk/about/governance/academic-governance/regulations](http://www.imperial.ac.uk/about/governance/academic-governance/regulations)

 [www.imperial.ac.uk/students/terms-and-conditions](http://www.imperial.ac.uk/students/terms-and-conditions)

### **Academic Feedback Policy**

We are committed in providing you with timely and appropriate feedback on your academic progress and achievement, enabling you to reflect on your academic progress. During your study you will receive different methods of feedback according to assessment type, discipline, level of study and your individual need. Further guidance on the Policy of Academic Feedback can be found on the Academic Governance website:

 [www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/academic-feedback/Academic-feedback-policy-for-taught-programmes.pdf](http://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/academic-feedback/Academic-feedback-policy-for-taught-programmes.pdf)

Students will obtain feedback via:

- Marked coursework
- Meetings with research project supervisors
- Meetings with personal tutor
- Meetings with Programme Director


- Feedback from students via:
- Departmental Postgraduate Staff-Student Committee (meets three times a year)
- Individual Course Survey (MEQ)
- Research project supervisors meeting their students
- Personal tutors meeting their students
- Meetings between programme director and students, particularly their elected representative
- The Postgraduate Tutor being approached by students

It is very important that you provide us with your feedback:

- If something is great we definitively want to know.
- If something does not work well - we can only fix it if we know about it.


An annual course review will take place taking into account the student feedback. Please note that your examination scripts once completed belong to the College under the GDPR legislation.

Please note that your examination scripts once completed belong to the College under the GDPR legislation. Please see the College GDPR webpages for further information at:

 [www.imperial.ac.uk/admin-services/secretariat/information-governance/data-protection/guidance/guide-2---exam-records/](http://www.imperial.ac.uk/admin-services/secretariat/information-governance/data-protection/guidance/guide-2---exam-records/)

## Provisional Marks Guidance

Provisional marks are agreed marks that have yet to be ratified by the Board of Examiners. These results are provisional and are subject to change by the Board of Examiners. The release of provisional marks is permitted except in certain circumstances. Further information can be found in the Guidelines for Issuing Provisional Marks to Students on Taught Programmes:

 [www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/markings-and-moderation/Guidelines-for-issuing-provisional-marks-to-students-on-taught-programmes.pdf](http://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/markings-and-moderation/Guidelines-for-issuing-provisional-marks-to-students-on-taught-programmes.pdf)

## Late Submission Policy

You are responsible for ensuring that you submit your coursework assessments (including time remote assessments) in the correct format and by the published deadline (date and time). Any piece of assessed work which is submitted beyond the published deadline (date and time) would be classed as a late submission and will incur a penalty (a cap at the pass mark, or it is classed as a fail). Further guidance on Late Submission of Assessments can be found on the Academic Governance website:

 [www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/markings-and-moderation/Late-submission-Policy.pdf](http://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/markings-and-moderation/Late-submission-Policy.pdf)

If you submit late due to mitigating circumstances, you may be able to make a claim that means that the cap on your mark is lifted. Please see below.

## Mitigating Circumstances

During your studies you may be affected by sudden or unforeseen circumstances. You should always contact your personal tutor for advice and support. If this happens at the time of, or immediately preceding, your assessments you may be able to make a claim for mitigating circumstances. If successful this claim enables the Board of Examiners when reviewing your marks at the end of the year to have greater discretion with regards to offering repeat attempts (either capped or uncapped), a repeat year, or with your progression or final classification. Please note, the Board are not permitted to amend the marks that you were awarded, only to take your claim into account making decisions.

All claims must be supported by independent evidence and submitted within 10 working days of the assessment deadline. Any claim made after this deadline is likely to be rejected unless there is a good reason (such as you were still unwell) until the point of submitting the claim. Details of the College's Mitigating Circumstances procedure can be found under the Mitigating Circumstances tab on the page below:

 [www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/](http://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/)

Through the procedure you may also be able to request an extension deadline to some forms of assessment. Wherever possible it is expected that this is used as it will enable to you complete your studies within the same College year (rather than over the summer holiday or in the next year).

Your department will have specific instructions for making a claim for mitigation or for requesting an extension.

For making a claim for mitigation claims, please contact the Student Experience Coordinator, Olivia Adu-Bofour.

For requesting an extension please contact the MSc Administrator.

Support for ongoing or long-term conditions, or for registered disabilities would not normally fall under the remit of mitigating circumstances and students should be supported through their studies with additional examination arrangements. More details can be found at:

 [www.imperial.ac.uk/disability-advisory-service/current-students/support-available/adjustments-and-support/](http://www.imperial.ac.uk/disability-advisory-service/current-students/support-available/adjustments-and-support/)

## Academic Misconduct Policy and Procedures


As has been highlighted under the Academic Integrity section, it is important that you learn how to properly attribute and acknowledge the work, data and ideas of others. Any proven form of academic misconduct is subject to penalties as outlined in the College's Misconduct Policy and Procedures.

 [www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/](http://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/)

## Unsatisfactory Engagement

Unfortunately, for a variety of reasons, sometimes students struggle to meet the College's expectations with regards to their engagement with their studies. The College has a process

to identify and support students by reaffirming these expectations with an action plan. If a student does not engage satisfactorily with these supportive measures, they can be withdrawn from their studies. The full details of this process, and the appeals procedure relating to it can be found at:

 [www.imperial.ac.uk/about/governance/academic-governance/academic-policy/complaints-appeals-and-discipline](http://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/complaints-appeals-and-discipline)

## Mutual Expectations


The mutual expectations document provides a suggested starter list of expectations that master's students and their project supervisors might expect from each other. It is designed to facilitate conversations to establish effective partnerships and it is recommended that the document is discussed at the first meeting between a main project supervisor and a new student. It should be noted that this is not exhaustive and that Departments may have variations in roles and responsibilities; supervisors should be aware of any such variations and will feed this into their discussions with students. Further, it is recognised that supervisors may not always be best placed to meet all the expectations laid out in the document, but should be aware of who, in their department, can. Students and project supervisors are encouraged to discuss, tailor and personalise the document further to suit. It is also recommended that students and their project supervisors re-visit the document throughout the duration of the project.

The Mutual Expectations document is available here:

 [www.bb.imperial.ac.uk/bbcswebdav/xid-12494962\\_1](http://www.bb.imperial.ac.uk/bbcswebdav/xid-12494962_1)

## Academic Appeals Procedure

We have rigorous regulations in place to ensure assessments are conducted with fairness and consistency, claims for mitigating circumstances have been considered reasonably and in line with the regulations of the College, and that the decisions of the Boards of Examiners maintain the integrity of our academic awards. Should you believe that you have grounds to appeal these decisions, we have laid out clear and consistent procedures through which appeals can be investigated and considered:

 [www.imperial.ac.uk/about/governance/academic-governance/academic-policy/complaints-appeals-and-discipline](http://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/complaints-appeals-and-discipline)

## Arithmetic Marks Check

If you consider that there may have been an error in the adding up of your marks, you may request an arithmetic mark check. Please note that this must be requested within 10 working days of the official notification of your results from the Results team in Registry. You may not request a marks check for a previous year of study. Please note that a marks check is not a remark of your work, but an administrative check that the marks have been accurately recorded.



## Student Complaints

The College strives to ensure that all students are well supported in their studies and receive a good experience of their programme and the wider College activities. If you feel that your experience has not lived up to these expectations the College has an agreed Student Complaints process through which your concern can be investigated and considered.


If you have any concerns about your experience at the College and have been unable to address these informally, you should contact Student Complaints who can provide advice about what is the appropriate way to seek to resolve this at:

 [student.complaints@imperial.ac.uk](mailto:student.complaints@imperial.ac.uk)

 [www.imperial.ac.uk/about/governance/academic-governance/academic-policy/complaints-appeals-and-discipline](http://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/complaints-appeals-and-discipline)

## Student Disciplinary Procedure

The College has the right to investigate any allegation of misconduct against a student and may take disciplinary action where it decides, on the balance of probabilities, that a breach of discipline has been committed. The general principles of the Student Disciplinary Procedure are available on the College website:

 [www.imperial.ac.uk/about/governance/academic-governance/academic-policy/complaints-appeals-and-discipline/](http://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/complaints-appeals-and-discipline/)

## Intellectual Property Rights Policy

For further guidance on the College's Intellectual Property Rights Policy is available on the College website:

 [www.imperial.ac.uk/research-and-innovation/research-office/research-policies/research-related-policies/ip-policy/](http://www.imperial.ac.uk/research-and-innovation/research-office/research-policies/research-related-policies/ip-policy/)

Further information about the Imperial Enterprise Lab can be found at:

 [www.imperial.ac.uk/students/enterprising-students](http://www.imperial.ac.uk/students/enterprising-students)

 [www.imperialenterpriselab.com/support/experts-in-residence](http://www.imperialenterpriselab.com/support/experts-in-residence)

## Use of IT Facilities

View the Conditions of Use of IT Facilities:

 [www.imperial.ac.uk/admin-services/ict/self-service/computers-printing/conditions-of-use-of-it-resources/](http://www.imperial.ac.uk/admin-services/ict/self-service/computers-printing/conditions-of-use-of-it-resources/)

## General Data Protection Regulation (GDPR)

All staff and students who work with personal data are responsible for complying with GDPR. The College will provide support and guidance but you do have a personal responsibility to comply.

In line with the above please see the College's privacy notice for students which form part of the terms and conditions of registration with the College.



[www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/admissions/Privacy-Notice-for-Students-and-Pro prospective-Students.pdf](http://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/admissions/Privacy-Notice-for-Students-and-Pro prospective-Students.pdf)

## 9. Wellbeing, Support and Advice

### In your department

Your department has a system of academic and pastoral care in place to make sure you have access to the appropriate support throughout your time at Imperial.

#### Your Personal Tutor

Your Personal Tutor is your first point of contact for pastoral support and advice. You can arrange to have a meeting with them at any time during your studies (although most Personal Tutors will have set office hours or may require you to make an appointment).

If necessary, they will direct you to an appropriate source of support.

#### Department of Mathematics Senior Postgraduate Tutor



Dr Gunnar Pruessner

6M32 Huxley Building

020 7594 8534

[g.pruessner@imperial.ac.uk](mailto:g.pruessner@imperial.ac.uk)

#### Departmental Disability Officers

Departmental Disability Officers are the first point of contact in your department for issues around disability. They can apply for additional exam arrangements on your behalf and will facilitate support within your department.

#### Your Department Disability Officer

Olivia Adu-Bofour

654 Huxley Building

020 7594 8500


[o.adu-bofour@imperial.ac.uk](mailto:o.adu-bofour@imperial.ac.uk)

If you have a disability or if you feel you may have disability please contact Disability Advisory Service (DAS) for an assessment. Once you meet with a disability adviser, a Suggested Reasonable Adjustments Document (SRAD) will be created. This will list what support you are eligible to receive.

More information on Departmental Disability Officers is available at:

 [www.imperial.ac.uk/disability-advisory-service/about-us/departmental-disability-officers/](http://www.imperial.ac.uk/disability-advisory-service/about-us/departmental-disability-officers/)

More information about how to request additional arrangements for exams if you have a disability is available at:

 [www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/additional-exam-arrangements-in-respect-of-disability](http://www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/additional-exam-arrangements-in-respect-of-disability)

### Postgraduate Coaching

As well as professional development opportunities, the Graduate School has a dedicated coaching programme designed to help you through challenging times. The **Postgraduate student coaching programme** has been established to provide an opportunity to talk, independently from your academic department, about challenges you may be experiencing during the course of your studies. The programme primarily focuses on building effective working relationships and there may be other self-development issues that you can explore with a trained coach.

 [www.imperial.ac.uk/students/academic-support/graduate-school/community-support/coaching/](http://www.imperial.ac.uk/students/academic-support/graduate-school/community-support/coaching/)

## Attributes and Aspiration Short Course

Attributes and Aspirations (AA) is an online short course that supports you to develop career planning and transferable skills. AA is flexible, has no assessments and can be accessed whenever you need it allowing you to proactively plan for your future. You can also use AA to develop key skills such as critical thinking, problem solving and time management. These will help you be a better student and are essential for your future - whether you choose to move to further study or to a job in industry.

AA is designed specifically for Imperial master's students. The Postgraduate Education Team worked with the Careers Service to design AA so that it works for you. We researched and talked to organisations that hire master's students, PhD course coordinators and alumni to make sure the skills and techniques taught in AA are those that you really need for your professional future. For further information, please see the [AA web pages](#).

 [www.imperial.ac.uk/students/attributes-and-aspirations](http://www.imperial.ac.uk/students/attributes-and-aspirations)

## Your Union

All Imperial students automatically become members of Imperial College Union when they register at the College. The Union provides a range of independent support.

### Imperial College Union Advice Service

The ICU Advice Service delivers free, confidential, and impartial advice covering academic issues, complaints and disciplinarys, College accommodation, and internal and external signposting. Contact [advice@imperial.ac.uk](mailto:advice@imperial.ac.uk) and complete the registration form to speak with a member of the team.

 [www.imperialcollegeunion.org/advice](http://www.imperialcollegeunion.org/advice)

### Student representatives

Imperial College Union operates two Representation Networks of over 600 elected student representatives – the Academic Representation Network and the Wellbeing Representation Network. Reps represent the voice of students and can direct you to internal and external support services. The Union's Liberation Officers also work to make sure that the views of under-represented and interest groups are heard at the College.

If you have any feedback about issues in your department relating to academic or wellbeing issues, you can speak to one of your student representatives.

 [www.imperialcollegeunion.org/your-union/your-representatives/a-to-z](http://www.imperialcollegeunion.org/your-union/your-representatives/a-to-z)

## Student Hub

At the Student Hub, you can access advice about accommodation, admissions and financial support and get help with international student enquiries, questions about student records, and exams.

 [www.imperial.ac.uk/student-hub](http://www.imperial.ac.uk/student-hub)

## Student Support Zone

If you have moved home to take up your place at Imperial you will need to register with a new doctor (also known as a General Practitioner or GP) so that you can access NHS healthcare. It's important that you register with a doctor soon after you arrive – don't wait until you are sick, as this could delay your access to treatment.


Student Support Zone has lots of information about the resources available at Imperial and beyond to help you to stay healthy and happy. It's a great place to start when you're looking for some support – it covers advice about housing and money, health, wellbeing and maintaining a good work-life balance, and provides the details of who you can contact if you need some extra support.

 [www.imperial.ac.uk/student-support-zone](http://www.imperial.ac.uk/student-support-zone)

## Useful support contacts

### Health and wellbeing

Imperial College Health Centre

 40 Prince's Gardens, South Kensington Campus

020 7584 6301

 [imperialcollege.hc@nhs.net](mailto:imperialcollege.hc@nhs.net)

 [www.imperialcollegehealthcentre.co.uk](http://www.imperialcollegehealthcentre.co.uk)


Imperial College Dental Centre

 Prince's Gardens, South Kensington Campus

020 7589 6623

 [www.imperialcollegedental.co.uk](http://www.imperialcollegedental.co.uk)




Student Counselling and Mental Health Advice Service

 020 7594 9637

 [counselling@imperial.ac.uk](mailto:counselling@imperial.ac.uk)

 [www.imperial.ac.uk/counselling](http://www.imperial.ac.uk/counselling)

## Multi-Faith Chaplaincy Service

 15 Prince's Gardens, South Kensington Campus  
 [chaplaincy@imperial.ac.uk](mailto:chaplaincy@imperial.ac.uk)  
 [www.imperial.ac.uk/chaplaincy](http://www.imperial.ac.uk/chaplaincy)

## Disability Advisory Service




 Room 566, Level 5, Sherfield Building, South Kensington Campus  
020 7594 9755  
 [disabilities@imperial.ac.uk](mailto:disabilities@imperial.ac.uk)  
 [www.imperial.ac.uk/disability-advisory-service](http://www.imperial.ac.uk/disability-advisory-service)

## Centre for Academic English

The goal of the Centre for Academic English is to ensure you develop both the ability and the confidence to excel as a communicator on your degree programme as well as in the workplace. From the very beginning of your degree and all the way through, we're here to help you realise your potential.

To achieve this, we've designed a flexible academic STEM communication programme enabling you to create your own personalised learning pathway. As you build your pathway, you'll have the freedom to select the language resources you need wherever you need them. These resources are the result of close collaborations with departments and so will meet your communication needs for Imperial written and spoken course assignments.

To find out more about what is available for you, visit the Centre for Academic English website. Centre for Academic English





 Level 3, Sherfield Building, South Kensington Campus  
 [english@imperial.ac.uk](mailto:english@imperial.ac.uk)  
 [www.imperial.ac.uk/academic-english](http://www.imperial.ac.uk/academic-english)

## International Student Support team

 020 7594 8040  
 [www.imperial.ac.uk/students/international-students/](http://www.imperial.ac.uk/students/international-students/)

## Careers


### Careers Service

 Level 5, Sherfield Building, South Kensington Campus  
 020 7594 8024  
 [careers@imperial.ac.uk](mailto:careers@imperial.ac.uk)  
 [www.imperial.ac.uk/careers](http://www.imperial.ac.uk/careers)

## ICT and software

### ICT Service Desk

 Central Library, South Kensington Campus

 020 7594 9000

 [www.imperial.ac.uk/ict/service-desk](http://www.imperial.ac.uk/ict/service-desk)

Software shop

 [www.imperial.ac.uk/admin-services/ict/self-service/computers-printing/devices-and-software/](http://www.imperial.ac.uk/admin-services/ict/self-service/computers-printing/devices-and-software/)

## 10. Student Administration

The Student Administration Team are responsible for the administration and maintenance of the student records for all students studying at the College. This includes enrolments, programme transfers, interruption of studies, withdrawals and processing of examination entry for research degree students. The team also use this information to fulfil reporting duties to the Student Loans Company and Transport for London , as well as other external bodies.

The Team is responsible for the processing of student results and awards on the student record system as well as the production and distribution of academic transcripts and certificates of award.

The 'My Documents' online portal allows you to access your documents, including proof of enrolment and award documentation. You can then digitally share these documents with third parties such as an employer or university.

Each document has a unique QR code with the official University watermark, making it easier for employers and others to verify your credentials. This online document sharing is a legitimate service, introduced and authorised by Imperial College London.

We would like to encourage you to use this online service in place of paper-based documentation. You can access the 'My Documents' portal here: <https://student-edocuments.imperial.ac.uk/Account/LoginViaAzure>

### Student Records



+44 (0)20 7594 7268

[student.records@imperial.ac.uk](mailto:student.records@imperial.ac.uk)

### Degree certificates



+44 (0)20 7594 7267

[certificates@imperial.ac.uk](mailto:certificates@imperial.ac.uk)

## 11. Work-life Balance

The pace and intensity of study at Imperial can be demanding so it's important to find time for outside interests.

### Imperial College Union

The Union's range of 360+ student-led clubs, societies and projects is one of the largest of any UK university, opening up lots of ways for you to enjoy your downtime.



[www.imperialcollegeunion.org/about-us](http://www.imperialcollegeunion.org/about-us)

### Move Imperial

Imperial College has a wide range of sports and activities on offer that cater for all experience levels and abilities. We have a recreational activity offer, competitive sports teams and an elite sport programme. We are dedicated to ensuring we have a diverse, inclusive and exciting offer for all.



More information about Imperial student memberships and updates to our services can be found at:

 [www.imperial.ac.uk/ethos/memberships/students](http://www.imperial.ac.uk/ethos/memberships/students)

With an annual fee of £55 you will get use of the gym and swimming facilities on our campuses.

 [www.imperial.ac.uk/sport](http://www.imperial.ac.uk/sport)

We have a huge collection of online resources, home workout videos, healthy recipes and playlists available to all as part of our MoveMore campaign, more information can be found at:

 [www.imperial.ac.uk/sport/move-more/](http://www.imperial.ac.uk/sport/move-more/)

## 12. Student feedback and representation


### Feedback from students

The College and Union is committed to continually improving your education and wider experience and a key part of this is your feedback. Feedback is thoroughly discussed by your student representatives and staff.

Examples of where student feedback has made a positive impact on the MSc in Statistics include managing coursework lengths and deadlines to minimise stress placed on students, holding more social events, streamlining administrative processes, creating greater transparency in the assessment process.

### Student representation

Student Representatives are recruited from every department to gather feedback from students to discuss with staff. More information about the role, and instructions on how to become an academic representative, are available on the Imperial College Union website.

 [www.imperialcollegeunion.org/your-union/your-representatives/academic-representatives/overview](http://www.imperialcollegeunion.org/your-union/your-representatives/academic-representatives/overview)

### Staff-Student Committee

Staff-Student Committees are designed to strengthen understanding and improve the flow of communication between staff and students and, through open dialogue, promote high standards of education and training, in a co-operative and constructive atmosphere. College good practice guidelines for staff-student committees are available here:

 [www.imperial.ac.uk/about/governance/academic-governance/academic-policy/student-feedback](http://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/student-feedback)

## 13. Student Surveys

Your feedback is important to your department, the College and Imperial College Union. Whilst there are a variety of ways to give your feedback on your College experience, the following surveys give you regular opportunities to make your voice heard:

- **Module Evaluation Questionnaire (MEQ)** The MEQ is your chance to tell us about the modules you have attended. The questionnaire is open to students across all years of study and runs at the end of the autumn, spring and summer terms.
- **Postgraduate Taught Experience Survey (PTES)** The PTES is a national survey which asks you to rate a range of elements related to your student experience such as teaching, assessment, support and resources. Results of this national survey are made publicly available.

The Union's "You Said, We Did" campaign shows you some of the changes made as a result of survey feedback:

 [www.imperialcollegeunion.org/you-said-we-did](http://www.imperialcollegeunion.org/you-said-we-did)

The Union's response to surveys can be found here:

 [www.imperialcollegeunion.org/your-union/your-representatives/responses](http://www.imperialcollegeunion.org/your-union/your-representatives/responses)

If you would like to know more about any of these surveys or see the results from previous surveys, please visit:



[www.imperial.ac.uk/students/academic-support/student-surveys/pg-student-surveys](http://www.imperial.ac.uk/students/academic-support/student-surveys/pg-student-surveys)

## 14. And finally

### Alumni Services

When you graduate you will be part of a lifelong community of over 190,000 alumni, with access to a range of alumni benefits including:

- discounts on further study at the College and at Imperial College Business School
- alumni email service
- networking events
- access to the Library and online resources
- access to the full range of careers support offered to current students for up to three years after you graduate
- access to our Alumni Visitor Centre at the South Kensington Campus, with free Wi-Fi, complimentary drinks, newspapers and magazines, and daytime left luggage facility

Visit the Alumni website to find out more about your new community, including case studies of other alumni and a directory of local alumni groups in countries across the world.



[www.imperial.ac.uk/alumni](http://www.imperial.ac.uk/alumni)

### Opportunities for Further Study

After you have completed the MSc in Statistics you may choose to continue with a PhD in Statistics at the Department of Mathematics. For further information visit:

<https://www.imperial.ac.uk/mathematics/postgraduate/doctoral-programme/>.