Programme Information		
Programme Title	**Programme Code**	**HECoS Code**
Statistics Statistics (Applied Statistics) Statistics (Biostatistics) Statistics (Data Science and Machine Learning) Statistics (Statistical Finance) Statistics (Theory and Methods)	G3U1 G3U1A G3U1B G3U1D G3U1S G3U1T	For Registry Use Only

Award	Length of Study	Mode of Study	Entry Point(s)	Total Credits	
				ECTS	CATS
MSc	1 Calendar Year (12 months)	Full Time	Annually in October	90-92.5	180-185
PG Diploma - G3U1PGD	N/A	N/A	N/A	60	120
The Postgraduate Diploma is an exit award that may be offered at the discretion of the Board of Examiners and is not available for entry. Students must apply to and join the MSc.					

Ownership			
Awarding Institution	Imperial College London	Faculty	Faculty of Natural Sciences
Teaching Institution	Imperial College London	Department	Mathematics
Associateship	Diploma of Imperial College (DIC)	Main Location(s) of Study	South Kensington Campus
External Reference			
Relevant QAA Benchmark Statement(s) and/or other external reference points		Master's Award in Mathematics, Statistics and Operational Research	
FHEQ Level		Level 7	
EHEA Level		2nd Cycle	
External Accreditor(s) (if applicable)			
External Accreditor 1:	N/A		
Accreditation received:	N/A	Accreditation renewal:	N/A
Collaborative Provision			
Collaborative partner	Collaboration type	Agreement effective date	Agreement expiry date
N/A	N/A	N/A	N/A

Specification Details	
Programme Lead	Dr Kolyan Ray
Student cohorts covered by specification	2025-26 entry
Date of introduction of programme	October 21
Date of programme specification/revision	January 25

Programme Overview

Statistical reasoning, tools, and methods are used in almost all employment sectors, including banking and finance, government, medical and scientific research, the pharmaceutical industry, and the digital economy.

This one-year full-time programme provides outstanding training both in theoretical and applied statistics. A common set of core modules in the first term ensure 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 elective modules in the second term, coupled with programme streams in Applied Statistics, Biostatistics, Data Science and Machine Learning, Statistical Finance, and Theory and Methods allow sufficient flexibility for students to develop their own specialist interests.

The project element of the programme runs full time from January to September and provides students with the opportunity to work with a member of academic staff on a state-of-the-art research problem that suits students' interests and is suitable for their chosen stream. It may be possible for projects to be carried out partly or wholly at an external organisation and requests will be considered on a case by case basis.

In addition to obtaining advanced knowledge across a range of subjects within the field of statistical and mathematical science, the programme will equip students with a range of transferable skills, including programming, problem-solving, critical thinking, scientific writing, project work and presentation, to enable students to take on prominent roles in a wide array of employment and research sectors.

Learning Outcomes

Upon successful completion of the programme, students will be able to:
1. Explain the fundamentals of Statistics as a living and unique discipline in its own right;
2. Evaluate, derive, compare, and justify statistical methods using the foundational mathematical framework of the discipline;
3. Apply and interpret statistical analyses using state-of-the-art computational techniques;
4. Clean and prepare data for analysis;
5. Program, perform data analysis, and solve problems using a state-of-the-art computing environment for statistical analysis;
6. Explain and deploy statistical reasoning for problem solving;
7. Assess the importance of the assumptions of a statistical method and the consequences of their violation;
8. Solve both open-ended problems and problems with well-defined solutions by formulating them in precise terms, identifying key issues, and trying different approaches in order to make progress;
9. Communicate effectively by listening carefully and presenting complex information in a clear and concise manner orally, on paper, and using IT;
10. Carry out extended statistical work both as an individual and a member of a group.

In addition, on completion of the MSc in Statistics programme students will be able to:
1. Extend program outcomes 2 and 3 in greater depth, in an area or set of areas of interest to the student, leading to current developments at the frontiers of the subject;

2. Carry out an independent investigation within the field of statistics using textbooks, scholarly articles, and other available literature, searching databases and interacting with colleagues and staff to extract important information.

In addition, on completion of the MSc in Statistics (Applied Statistics) programme students will be able to:
1. Develop a familiarity with a wide range of applied statistical techniques and their application in a variety of scientific, governmental, industrial, and/or commercial settings;
2. Extend program outcomes 2 and 3 in greater depth, as they pertain to applied statistical methods, leading to current developments at the frontiers of the subject;
3. Carry out an independent investigation within the area of applied statistics using textbooks, scholarly articles, and other available literature, searching databases and interacting with colleagues and staff to extract important information.

In addition, on completion of the MSc in Statistics (Biostatistics) programme students will be able to:
1. Develop and apply statistical theory and methods in a wide range of situations relevant to research and real problems arising in biology and medicine;
2. Extend program outcomes 2 and 3 in greater depth, as they pertain to statistical methods in biostatistics, leading to current developments at the frontiers of the subject;
3. Carry out an independent investigation within the area of biostatistics using textbooks, scholarly articles, and other available literature, searching databases and interacting with colleagues and staff to extract important information.

In addition, on completion of the MSc in Statistics (Data Science and Machine Learning) programme students will be able to:
1. Develop a familiarity with a wide range of data science techniques and their application in a variety of scientific, governmental, industrial, and/or commercial settings;
2. Extend program outcomes 2 and 3 in greater depth, as they pertain to statistical methods in data science, leading to current developments at the frontiers of the subject;
3. Carry out an independent investigation within the area of data science and machine learning using textbooks, scholarly articles, and other available literature, searching databases and interacting with colleagues and staff to extract important information.

In addition, on completion of the MSc in Statistics (Statistical Finance) programme students will be able to:
1. Develop and apply statistical theory and methods in a wide range of situations relevant to research and real problems arising in commerce and finance;
2. Extend program outcomes 2 and 3 in greater depth, as they pertain to statistical methods in financial statistics, leading to current developments at the frontiers of the subject;
3. Carry out an independent investigation within the area of financial statistics using textbooks, scholarly articles, and other available literature, searching databases and interacting with colleagues and staff to extract important information.

In addition, on completion of the MSc in Statistics (Theory and Methods) programme students will be able to:
1. Develop a familiarity with a wide range of statistical methods and their underlying theory;
2. Extend program outcomes 2 and 3 in greater depth, as they pertain to statistical theory and methods, leading to current developments at the frontiers of the subject;
3. Carry out an independent investigation within the area of statistical theory and methods using textbooks, scholarly articles, and other available literature, searching databases and interacting with colleagues and staff to extract important information.

Students exiting with the PG Diploma in Statistics will have accomplished at least learning outcomes 1. - 8.

The Imperial Graduate Attributes are a set of core competencies which we expect students to achieve through completion of any Imperial degree programme. The Graduate Attributes are available at: www.imperial.ac.uk/about/education/our-graduates/

Entry Requirements

Academic Requirement	The minimum requirement is normally a 2:1 UK Bachelor's Degree with Honours in statistics, mathematics or a comparable qualification that is recognised by the university in a related subject, such as engineering, physics or computer science.
Non-academic Requirements	N/A
English Language Requirement	Higher requirement (PG) Please check for other Accepted English Qualifications
Admissions Test/Interview	N/A

The programme's competency standards documents are available from the department.

Learning & Teaching Approach

Learning and Teaching Delivery Methods

Teaching and learning on the programme will be delivered through a range of methods including lectures (in the form of live lectures or asynchronous videos), tutorial sessions (that include problem classes, Q&A sessions and group tutorials), and practical computational sessions. In addition, peer learning will be encouraged and supported and an office hour with the lecturer for addressing additional individual questions will compliment each module.

During the time that students work on their Statistics research project they will be meeting regularly with their project supervisor(s). Students are encouraged to attend the Statistics research seminars throughout the academic year.

These features will allow students to participate in a seamless, flexible, and engaging learning experience and ensure the highest quality online learning environment.

Overall Workload
At Imperial, each ECTS credit taken equates to an expected total study time of 25 hours. Therefore, the expected total study time is 2250 hours per year, this being composed of roughly 1500 hours associated with modules and 750 hours with the research project. Overall workload consists of face-to-face sessions and independent learning.

The year-long Data Science core module of the MSc is worth 5 ECTS (125 hours of study, running from autumn to late summer). The four core modules of the MSc delivered in the Autumn term are worth 7.5 ECTS (187.5 hours of study). Students will choose from elective modules that will primarily be delivered in the spring term and are each worth 5 ECTS (125 hours of study) or 7.5 ECTS (187.5 hours of study) . Further elective modules from the Machine Learning and Data Science course and the MSci in Mathematics programs are open to MSc in Statistics student and worth 5 ECTS (125 hours of study) or 7.5 ECTS (187.5 hours of study). In the Spring term, students need to choose modules for a total of 25 or 27.5 ECTS. The research project component of the MSc is worth 30 ECTS (750 hours) and will be primarily delivered in the Spring and Summer terms, as well as the summer months.

In-person teaching

Depending on module choices, the live sessions with lecturers will comprise a mix of lectures, tutorial sessions, and practical computational sessions. During the live sessions, lecturers will build on the preparatory material for each week and focus on achieving the advanced learning outcomes as appropriate for a postgraduate degree, including comparing and justifying statistical methods using mathematical frameworks, interpreting statistical analyses, solving unseen problem using state-of-the art computing, and communicating effectively complex information.

Independent learning

Students will spend a substantial amount of time on independent study. This will include preparation for the live sessions by working through asynchronous videos, lecture notes or other material provided by the lecturer; working through problem sheets and other formative assignments either individually or in groups; other preparation for tutorials and group-learning classes; producing coursework for submission and assessment, and preparation for examinations.

Assessment Strategy

Assessment Methods

The format of assessments will vary according to the aims, content and learning outcomes of each module.

The assessment methods that the modules will use include:
- Written open-book examinations. The open-book material allowed during the examinations consists of any material provided by the lecturers and annotated by the students, i.e. annotated lecture notes, annotated slides, and annotated problem class sheets or hand-written notes. Books and electronic devices are not allowed.
- Written closed-book examinations, where open-book material as defined above, books or electronic devices are not allowed.
- Group assessments
- Enhanced coursework assessments
- Tests, including online quizzes and in-class tests
- Oral examinations

All these assessments are designed to support students in meeting the learning outcomes of each module and of the overall degree. In addition, formative assessments including mock courseworks, tests, quizzes, and multiple-choice questions will be used by the lecturers for supporting learning.

The research project component of the MSc is scaffolded in relation to the typical stages of a research study: from (1) literature review, underpinning learning or exploratory data analysis, study design and project proposal, to (2) delivering research and final deliverable. The stages are supported by summative assessments, providing the opportunity for both feedback and direction on following stages. The final assessment involves a written report, oral examination, and research independence.

Academic Feedback Policy

Module Feedback:
Both formative and assessed courseworks of modules will be marked and returned promptly to students. General feedback for each coursework will be given during the tutorials by the lecturers. Students are given access to lecturers both informally and through a formal office hours system. This gives students a ready opportunity to discuss any difficulties they encounter with the module lecturer.
Lecturers will also use formative tests to track student learning, for example through online quizzes and questions on Blackboard and Mentimeter. Such tests allow prompt feedback and are also an opportunity for both lecturers and students to identify areas that need more attention.

Research Project Feedback:

During the time that students will work on their research project, students will meet regularly with their project supervisors, potential industry partners, graduate teaching assistants, and peer students. These meetings allow for feedback on the project work and discussion of future directions. The project supervisor also provides feedback on a draft of the written thesis. In addition, each student receives feedback on their research work (and project) from other academics during formative events. Each thesis and oral presentation of the research projects receives written feedback by the examiners at the end of the degree.

Degree Feedback:

Students will meet regularly with their personal tutors during the year. These meetings allow for feedback on individual progress toward the degree, for advice on the choice of modules and project to complement their future career plans.

Meetings of the entire MSc student cohort with the Programme Director are held twice a year with the aim of giving students an open forum for discussing general questions and concerns about the programme requirements, expectations, workload, assessment, and feedback. Provisional marks (subject to change by the Board of Examiners) for the Autumn term modules are released as soon as possible in term 2 and for the Spring term modules as soon as possible in the summer.

Imperial's Policy on Academic Feedback and guidance on issuing provisional marks to students is available at: www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/

Re-sit Policy
Imperial's Policy on Re-sits is available at: www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/
Mitigating Circumstances Policy
Imperial's Policy on Mitigating Circumstances is available at: www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/

Additional Programme Costs
No additional costs are anticipated.

Important notice: The Programme Specifications are the result of a large curriculum and pedagogy reform implemented by the Department and supported by the Learning and Teaching Strategy of Imperial College London. The modules, structure and assessments presented in this Programme Specification are correct at time of publication but might change as a result of student and staff feedback and the introduction of new or innovative approaches to teaching and learning. Students will be consulted and notified in a timely manner of any changes to this document.

Programme Structure[1]					
Year 1 – FHEQ Level 7 **MSc in Statistics (General Stream)** **Students will study all core modules and must select elective modules totalling to 25-27.5 ECTS.**					
Code	Module Title	Core/ Elective	Group	Term	Credits
MATH70082	Probability for Statistics	Core		Autumn	7.5
MATH70078	Fundamentals of Statistical Inference	Core		Autumn	7.5
MATH70071	Applied Statistics	Core		Autumn	7.5
MATH70093	Computational Statistics and Machine Learning	Core		Autumn	7.5
MATH70076	Data Science	Core		Year-long (autumn to late summer)	5
MATH70088	Statistics Research Project	Core		Year long (autumn to late summer)	30
MATH70013	Advanced Simulation Methods	Elective		Spring	5
MATH70070	Advanced Statistical Finance	Elective		Spring	5
MATH70072	Big Data (not running in 2025-26)	Elective		Spring	5
MATH70073	Advanced Bayesian Methods (not running in 2025-26)	Elective		Spring	5
MATH70101	Deep Learning	Elective		Spring	7.5
MATH70079	Introduction to Statistical Finance	Elective		Spring	5
MATH70134	Mathematical Foundations of Machine Learning (not running in 2025-26)	Elective		Spring	7.5
MATH70081	Nonparametric Statistics	Elective		Spring	5
MATH70083	Statistical learning for High-Dimensional Data	Elective		Spring	5
MATH70089	Stochastic Processes	Elective		Spring	5
MATH70048	Survival Models	Elective		Spring	7.5
MATH70046	Time Series Analysis	Elective		Spring	7.5

[1] **Core** modules are those which serve a fundamental role within the curriculum, and for which achievement of the credits for that module is essential for the achievement of the target award. Core modules must therefore be taken and passed in order to achieve that named award. **Compulsory** modules are those which are designated as necessary to be taken as part of the programme syllabus. Compulsory modules can be compensated. **Elective** modules are those which are in the same subject area as the field of study and are offered to students in order to offer an element of choice in the curriculum and from which students are able to select. Elective modules can be compensated.

MATH70139	Spatial Statistics	Elective		Spring	7.5
MATH70099	Big Data: Statistical Scalability with PySpark	Elective		Spring	5
MATH70148	Probabilistic Generative Models	Elective		Spring	7.5
				Credit Total	90 – 92.5

Programme Structure

Year 1 – FHEQ Level 7
MSc in Statistics (Applied Statistics)
Students will study all core modules, must select <u>at least 3 modules from stream specific modules group,</u> and can select other elective modules ensuring they take a total of 25-27.5 ECTS worth of elective modules:

Code	Module Title	Core/ Compulsory Elective/	Group	Term	Credits
MATH70082	Probability for Statistics	Core		Autumn	7.5
MATH70078	Fundamentals of Statistical Inference	Core		Autumn	7.5
MATH70071	Applied Statistics	Core		Autumn	7.5
MATH70093	Computational Statistics and Machine Learning	Core		Autumn	7.5
MATH70076	Data Science	Core		Year-long (autumn to late summer)	5
MATH70088	Statistics Research Project	Core		Year-long (autumn to late summer)	30
Stream specific modules					
MATH70013	Advanced Simulation Methods	Elective		Spring	5
MATH70073	Advanced Bayesian Methods (not running in 2025-26)	Elective		Spring	5
MATH70079	Introduction to Statistical Finance	Elective		Spring	5
MATH70134	Mathematical Foundations of Machine Learning (not running in 2025-26)	Elective		Spring	7.5
MATH70083	Statistical learning for High-Dimensional Data	Elective		Spring	5
MATH70148	Probabilistic Generative Models	Elective		Spring	7.5
Other elective modules					
MATH70070	Advanced Statistical Finance	Elective		Spring	5

MATH70072	Big Data (not running in 2025-26)	Elective		Spring	5
MATH70099	Big Data: Statistical Scalability with PySpark	Elective		Spring	5
MATH70101	Deep Learning	Elective		Spring	7.5
MATH70081	Nonparametric Statistics	Elective		Spring	5
MATH70089	Stochastic Processes	Elective		Spring	5
MATH70048	Survival Models	Elective		Spring	7.5
MATH70046	Time Series Analysis	Elective		Spring	7.5
MATH70139	Spatial Statistics	Elective		Spring	7.5
MATH70099	Big Data: Statistical Scalability with PySpark	Elective		Spring	5
				Credit Total	90 – 92.5

Programme Structure

Year 1 – FHEQ Level 7
MSc in Statistics (Biostatistics)
Students will study all core modules, must select <u>at least 3 modules from the stream specific modules group,</u> and can select other elective modules ensuring they take a total of 25-27.5 ECTS worth of elective modules:

Code	Module Title	Core/ Compulsory Elective/	Group	Term	Credits
MATH70082	Probability for Statistics	Core		Autumn	7.5
MATH70078	Fundamentals of Statistical Inference	Core		Autumn	7.5
MATH70071	Applied Statistics	Core		Autumn	7.5
MATH70093	Computational Statistics and Machine Learning	Core		Autumn	7.5
MATH70076	Data Science	Core		Year-long (autumn to late summer)	5
MATH70088	Statistics Research Project	Core		Year-long (autumn to late summer)	30

Stream specific modules

MATH70073	Advanced Bayesian Methods (not running in 2025-26)	Elective		Spring	5
MATH70013	Advanced Simulation Methods	Elective		Spring	5
MATH70072	Big Data (not running in 2025-26)	Elective		Spring	5

MATH70083	Statistical learning for High-Dimensional Data	Elective		Spring	5
MATH70046	Time Series Analysis	Elective		Spring	7.5
MATH70099	Big Data: Statistical Scalability with PySpark	Elective		Spring	5
Other elective modules					
MATH70070	Advanced Statistical Finance	Elective		Spring	5
MATH70101	Deep Learning	Elective		Spring	7.5
MATH70079	Introduction to Statistical Finance	Elective		Spring	5
MATH70134	Mathematical Foundations of Machine Learning (not running in 2025-26)	Elective		Spring	7.5
MATH70081	Nonparametric Statistics	Elective		Spring	5
MATH70089	Stochastic Processes	Elective		Spring	5
MATH70048	Survival Models	Elective		Spring	7.5
MATH70139	Spatial Statistics	Elective		Spring	7.5
MATH70148	Probabilistic Generative Models	Elective		Autumn	7.5
				Credit Total	90 – 92.5

Programme Structure

Year 1 – FHEQ Level 7
MSc in Statistics (Data Science and Machine Learning)
Students will study all core modules, must select <u>at least 3 modules from the stream specific modules group,</u> and can select other elective modules ensuring they take a total of 25-27.5 ECTS worth of elective modules:

Code	Module Title	Core/ Elective	Group	Term	Credits
MATH70082	Probability for Statistics	Core		Autumn	7.5
MATH70078	Fundamentals of Statistical Inference	Core		Autumn	7.5
MATH70071	Applied Statistics	Core		Autumn	7.5
MATH70093	Computational Statistics and Machine Learning	Core		Autumn	7.5
MATH70076	Data Science	Core		Year-long (autumn to late summer)	5
MATH70088	Statistics Research Project	Core		Year-long (autumn to late summer)	30

	Stream specific modules				
MATH70073	Advanced Bayesian Methods (not running in 2025-26)	Elective		Spring	5
MATH70072	Big Data (not running in 2025-26)	Elective		Spring	5
MATH70099	Big Data: Statistical Scalability with PySpark	Elective		Spring	5
MATH70101	Deep Learning	Elective		Spring	7.5
MATH70134	Mathematical Foundations of Machine Learning (not running in 2025-26)	Elective		Spring	7.5
MATH70081	Nonparametric Statistics	Elective		Spring	5
MATH70148	Probabilistic Generative Models	Elective		Spring	7.5
	Other elective modules				
MATH70013	Advanced Simulation Methods	Elective		Spring	5
MATH70070	Advanced Statistical Finance	Elective		Spring	5
MATH70079	Introduction to Statistical Finance	Elective		Spring	5
MATH70083	Statistical learning for High-Dimensional Data	Elective		Spring	5
MATH70089	Stochastic Processes	Elective		Spring	5
MATH70048	Survival Models	Elective		Spring	7.5
MATH70046	Time Series Analysis	Elective		Spring	7.5
MATH70139	Spatial Statistics	Elective		Spring	7.5
				Credit Total	90 – 92.5

Programme Structure

Year 1 – FHEQ Level 7
MSc in Statistics (Statistical Finance)
Students will study all core modules, must select <u>at least 3 modules from the stream specific modules group,</u> and can select other elective modules ensuring they take a total of 25-27.5 ECTS worth of elective modules:

Code	Module Title	Core/ Compulsory Elective/	Group	Term	Credits
MATH70082	Probability for Statistics	Core		Autumn	7.5
MATH70078	Fundamentals of Statistical Inference	Core		Autumn	7.5
MATH70071	Applied Statistics	Core		Autumn	7.5
MATH70093	Computational Statistics and Machine Learning	Core		Autumn	7.5

Code	Module Title		Core/Compulsory	Group	Term	Credits
MATH70076	Data Science	Core			Year-long (autumn to late summer)	5
MATH70088	Statistics Research Project	Core			Year-long (autumn to late summer)	30
Stream specific modules						
MATH70013	Advanced Simulation Methods	Elective			Spring	5
MATH70070	Advanced Statistical Finance	Elective			Spring	5
MATH70072	Big Data (not running in 2025-26)	Elective			Spring	5
MATH70099	Big Data: Statistical Scalability with PySpark	Elective			Spring	5
MATH70079	Introduction to Statistical Finance	Elective			Spring	5
MATH70048	Survival Models	Elective			Spring	7.5
MATH70089	Stochastic Processes	Elective			Spring	5
Other elective modules						
MATH70073	Advanced Bayesian Methods (not running in 2025-26)	Elective			Spring	5
MATH70101	Deep Learning	Elective			Spring	7.5
MATH70134	Mathematical Foundations of Machine Learning (not running in 2025-26)	Elective			Spring	7.5
MATH70081	Nonparametric Statistics	Elective			Spring	5
MATH70083	Statistical learning for High-Dimensional Data	Elective			Spring	5
MATH70046	Time Series Analysis	Elective			Spring	7.5
MATH70139	Spatial Statistics	Elective			Spring	7.5
MATH70148	Probabilistic Generative Models	Elective			Autumn	7.5
					Credit Total	90 – 92.5

Programme Structure

Year 1 – FHEQ Level 7
MSc in Statistics (Theory and Methods)
Students will study all core modules, must select <u>at least 3 modules from the stream specific modules group,</u> and can select other elective modules ensuring they take a total of 25-27.5 ECTS worth of elective modules:

Code	Module Title	Core/ Compulsory	Group	Term	Credits

			Elective/			
MATH70082	Probability for Statistics	Core		Autumn	7.5
MATH70078	Fundamentals of Statistical Inference	Core		Autumn	7.5
MATH70071	Applied Statistics	Core		Autumn	7.5
MATH70093	Computational Statistics and Machine Learning	Core		Autumn	7.5
MATH70076	Data Science	Core		Year-long (autumn to late summer)	5
MATH70088	Statistics Research Project	Core		Year-long (autumn to late summer)	30
Stream specific modules					
MATH70013	Advanced Simulation Methods	Elective		Spring	5
MATH70134	Mathematical Foundations of Machine Learning (not running in 2025-26)	Elective		Spring	7.5
MATH70081	Nonparametric Statistics	Elective		Spring	5
MATH70089	Stochastic Processes	Elective		Spring	5
MATH70048	Survival Models	Elective		Spring	7.5
MATH70148	Probabilistic Generative Models	Elective		Spring	7.5
Other elective modules					
MATH70070	Advanced Statistical Finance	Elective		Spring	5
MATH70073	Advanced Bayesian Methods (not running in 2025-26)	Elective		Spring	5
MATH70072	Big Data (not running in 2025-26)	Elective		Spring	5
MATH70099	Big Data: Statistical Scalability with PySpark	Elective		Spring	5
MATH70101	Deep Learning	Elective		Spring	7.5
MATH70079	Introduction to Statistical Finance	Elective		Spring	5
MATH70083	Statistical learning for High-Dimensional Data	Elective		Spring	5
MATH70046	Time Series Analysis	Elective		Spring	7.5
MATH70139	Spatial Statistics	Elective		Spring	7.5
				Credit Total	90 – 92.5

Progression and Classification

Award and Classification for Postgraduate Students

Award of a Masters Degree
To qualify for the award of a postgraduate degree students must have:
1. accumulated credit to the value of no fewer than 90 credits at Level 7
2. and no more than 15 credits as a Compensated Pass;
3. met the specific requirements of their chosen specialisation for an award as outlined in the approved programme specification.

Exit Degree:
Award of a Postgraduate Diploma (PG Dip)

To qualify for the award of the PG in Statistics students must have passed:
1. Accumulated credit from modules to the value of no fewer than 60 credits at Level 7;
2. and no more than 10 credits as a Compensated Pass;
3. met the specific requirements of their chosen specialisation for an award as outlined in the approved programme specification.

Classification of Postgraduate Taught Awards

The university sets the class of Degree that may be awarded as follows:
1. Distinction: 70.00% or above
2. Merit: 60.00% or above but less than 70.00%.
3. Pass: 50.00% or above but less than 60.00%.

For a Masters, the degree classification will be determined through:

The weighted average mark in the designated 'taught' and 'research' aspects of the programme each meeting the threshold for the relevant classification band. The core module MATH70076 Data Science is assessed through Pass/Fail and does not contribute to the weighted average mark of the taught components.

The degree algorithm provides an appropriate and reliable summary of student performance against the programme learning outcomes. It reflects the design, delivery, and structure of the programme without unduly over-emphasising particular aspects.

Programme Specific Regulations

N/A

Supporting Information
The Programme Handbook is available at: www.imperial.ac.uk/mathematics/postgraduate/msc/statistics/current/
The Module Handbook is available at: www.imperial.ac.uk/mathematics/postgraduate/msc/statistics/prospective/
Imperial's entry requirements for postgraduate programmes can be found at: www.imperial.ac.uk/study/pg/apply/requirements
Imperial's Quality & Enhancement Framework is available at: www.imperial.ac.uk/registry/proceduresandregulations/qualityassurance
Imperial's Academic and Examination Regulations can be found at: www.imperial.ac.uk/about/governance/academic-governance/regulations
Imperial College London is an independent corporation whose legal status derives from a Royal Charter granted under Letters Patent in 1907. In 2007 a Supplemental Charter and Statutes was granted by HM Queen Elizabeth II. This Supplemental Charter, which came into force on the date of Imperial's Centenary, 8th July 2007, established Imperial as a University with the name and style of "The Imperial College of Science, Technology and Medicine". www.imperial.ac.uk/admin-services/secretariat/university-governance-structure/charters/
Imperial College London is regulated by the Office for Students (OfS) www.officeforstudents.org.uk/advice-and-guidance/the-register/
This document provides a definitive record of the main features of the programme and the learning outcomes that students may reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities provided. This programme specification is primarily intended as a reference point for prospective and current students, academic and support staff involved in delivering the programme and enabling student development and achievement, for its assessment by internal and external examiners, and in subsequent monitoring and review.