Programme Information		
Programme Title	Programme Code	HECoS Code
Risk Management and Financial Engineering	N34G	For Registry Use Only
Risk Management and Financial Engineering	N34G2	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 September	90	180
MSc	16 months	Full Time	Transfer within Programme	120	240

Ownership			
Awarding Institution	Imperial College London	Faculty	Imperial Business School
Teaching Institution	Imperial College London	Department	Imperial Business School
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 Degrees in Business and Management	
FHEQ Level		Level 7	
EHEA Level		2nd Cycle	
External Accreditor(s) (if applicable)			
External Accreditor 1:	EQUIS		
Accreditation received:	2006	Accreditation renewal:	2030
External Accreditor 2:	AACSB International		
Accreditation received:	2012	Accreditation renewal:	2028
External Accreditor 3:	Professional Risk Managers' International Association (PRMIA)		

Accreditation received:	Annually	Accreditation renewal:	Annually
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 Lara Cathcart	
Student cohorts covered by specification		2026-27 entry	
Date of introduction of programme		October 06	
Date of programme specification/revision		September 26	

Programme Overview

The programme is run by Imperial Business School and commences in September with examinations taking place at the end of each term.

In summary, the Programme comprises 11 taught units (7 compulsory* modules and 4 electives**) and the Applied Project or 10 taught units (7 compulsory modules and 3 electives) and an Individual Research Project.

You will also undertake a compulsory module in Foundations in Risk Management & Financial Engineering in September which you must pass successfully.

In addition, there is an on-line Accounting Primer, an online Ethics & Professional Standards in Finance module, an online Finance Careers Primer and a Career & Professional Development module. These modules do not, however, contribute to the calculation of the final award.

You will devote the summer term and the normal summer vacation period to working on your Project. You will be assessed by an individual Applied Project of 3,000 words and a short presentation. If you are on an approved work placement, you may, with the Academic Director's approval, write a report which incorporates the learning from your placement. As an alternative to the Applied Project, you can, with permission from the Academic Director, write an individual Research Project which is an original piece of work not exceeding 10,000 words. Completion of a Research Project will require you to take one less elective. The Research Project is particularly suited to those wanting to do a PhD after their MSc programme. 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.

You may also take the optional online module *Introduction to Maths*, as well as the in-person modules *C++* and *VBA*.

If you secure an extended Work Placement opportunity (4-6 months in duration) you will be able to transfer to the 16 month programme option in consultation with the Academic Director.

Graduates from this programme typically progress to careers in; asset/ investment management, investment banking, consulting, risk management, sales/ trading, quant and financial engineering, general finance, fintech, banking, insurance and private equity.

*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.

Learning Outcomes

The programme aims to provide quantitative and analytic skills that enable you to embark on a quant-oriented career in the financial services sector. It has been designed for technically-minded graduates who want a deep, analytical study of risk management and financial engineering or for those wanting to pursue further academic study (doctoral research).

Upon successful completion of the programme, you will be able to:

1. Explain fundamental finance theories and models including their derivation and their use and context in the measurement and management of risk;
2. Apply mathematical tools to complex financial problems relating to risk measurement, risk management and risk pricing;
3. Develop live implementations of financial models and use these implementations in practice, using a range of programming tools;
4. Analyse and evaluate investment decisions and data. Apply econometric theory and software to draw valid conclusions about data.

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: https://www.imperial.ac.uk/about/education/our-graduates/

Entry Requirements

Academic Requirement	Normally an Upper Second Class Honours Degree (or international equivalent) in a highly quantitative discipline such as Mathematics, Engineering, Science or Economics. The Business School does not award credit for Prior Learning (Recognition of Prior Certified Learning (RPCL) or Recognition of Prior Experiential Learning (RPEL)).
Non-academic Requirements	When selecting candidates, the Business School uses a range of criteria: academic ability, future potential, and the commitment which students will bring to the programme. Candidate should have a well-researched career plan with clear short and long term goals. Two references are also required.
English Language Requirement	Higher requirement IELTS score of 7.0 overall (minimum 6.5 in all elements).
Admissions Test/Interview	Students are required to take an online interview via the Shortlister platform. All interviews are reviewed and scored as part of the Admissions process.

The programme's competency standards documents can be requested from the Business School's Education Quality Office.

Learning & Teaching Approach

Learning and Teaching Delivery Methods

- Lectures
- Practical classes
- Equipment/technique demonstrations (e.g. Bloomberg)
- Seminars
- Workshops
- Case studies
- Group work exercises
- Formal presentations
- Pre-programme on-line modules
- On-line discussion forums
- On-line lecture materials
- Interactive content including video and module quizzes
- Work Placement Opportunity

Please refer to the Teaching Toolkit for advice on learning and teaching approaches:
https://www.imperial.ac.uk/staff/educational-development/teaching-toolkit/

Overall Workload

Your overall workload consists of face-to-face sessions and independent learning. While your actual contact hours may vary according to the optional modules you choose to study, the following gives an indication of how much time you will need to allocate to different activities at each level of the programme. 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.

Depending on the elective modules selected, you may spend approximately 20% of your total study hours on lectures, seminars and similar, and around 80% of your time on independent study.

Assessment Strategy

Assessment Methods

Modules will be assessed by one or more of the following types of assessment methods:

- Essays
- Continuous assessments
- Written Examinations/Tests
- Multiple Choice Tests
- Formal Presentations
- Reports
- Case Studies
- Participation

Assessed modules comprise coursework that is designed to help you master key elements of the subject and, in part, to help prepare you for the final assessment, which is typically a report or examination. Examinations are scheduled throughout the year, generally at the end of the term the module is taught or at the start of the subsequent term. Exact timings are detailed in the programme overview section above. The format of examinations may be written, computer-based or timed remote assessment.

Coursework weighting varies among modules. The various assessments allow you to demonstrate that you have met the intended learning outcomes for each module and these collectively contribute towards your achievement of the programme's learning outcomes, detailed above.

Assessments are designed to ensure that you have acquired the core knowledge and skills expected of a Business School graduate and that you are able to apply these in your career aspirations upon completion of the programme.

Academic Feedback Policy

Feedback can take many forms. During lectures and classes, you will receive verbal feedback on the ideas that you contribute to discussions and on in-class presentations. The online teaching materials contain exercises with built-in, immediate, feedback that is received when you submit an answer.

The Business School aims to provide feedback on coursework within two weeks. This will be sent in written form to the individual or the group, as appropriate. Academic staff may also provide verbal feedback of a general nature in class or posted to our virtual learning environment. Office hours offered on all modules also provide an opportunity for individual feedback.

The Business School aims to provide provisional examination grades twenty-five days from the end of the examination period. General feedback to the cohort is provided on examination performance, usually in written form. If you need to resit an examination you may also approach the module leader for feedback on your performance in the first sitting.

You will be provided with a percentage grade for coursework and examinations with the final numerical mark only confirmed after the Board of Examiners Meeting and then released by Registry. Grades received during the year are deemed provisional until confirmed by the Final Board of Examiners.

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

Re-sit Policy

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

Mitigating Circumstances Policy

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

Additional Programme Costs

This section should outline any additional costs relevant to this programme which are not included in students' tuition fees.

Description	Mandatory/Optional	Approximate cost
Costs related to the international electives	Optional- if international elective is selected	£1000 - £1500* *exact costs vary by location

The below section only applies to students who transfer to the 16-month programme

Extended Programme	Mandatory	Students who choose the Extended Work Placement will need to transfer to the 16-month programme and will be required to pay a fee of £1500. Students will also need to pay to extend their student visa if required, and they are expected to arrange their own accommodation throughout their placement. Other costs vary according to the location of the extended work placement

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. You will be consulted and notified in a timely manner of any changes to this document.

Programme Structure (12 month) [1]					
Year 1 – FHEQ Level 7 **You will study all compulsory modules. On the Applied Project route, you must select 4 electives. On the Research Report route, you must select 3 electives.**					
Code	Module Title	Core/ Compulsory/ Elective	Group*	Term	Credits
BUSI70695	Ethics and Professional Standards in Finance	Required		SU	0.00
BUSI70588	Foundations in Risk Management & Financial Engineering	Compulsory		Sept	7.50
BUSI70607	Financial Statistics	Compulsory		AU	7.50
BUSI70614	Investments and Portfolio Management	Compulsory		AU	7.50
BUSI70631	Stochastic Calculus for Finance	Compulsory		AU	7.50
BUSI70586	Empirical Finance: Methods & Applications	Compulsory		SP	7.50
BUSI70626	Financial Engineering	Compulsory		SP	7.50
BUSI70630	Risk Management and Valuation	Compulsory		SP	7.50
BUSI70650	Advanced Options Theory	Elective	A	SU	7.50
BUSI70567	Applied Quantitative Macro Strategies (suspended for 26.27)	Elective	A	SU	7.50
BUSI70651	Applied Trading Strategies	Elective	A	SU	7.50
BUSI70583	Asset Allocation & Investment Strategies	Elective	A	SP	7.50
BUSI70652	Banks, Regulation & Monetary Policy	Elective	A	SU	7.50
BUSI70584	Big Data in Finance	Elective	A	SP	7.50
BUSI70654	Climate Finance	Elective	A	SP	7.50
BUSI70655	Computational Finance with C++	Elective	A	SU	7.50
BUSI70596	Corporate Dealmaking	Elective	A	SU	7.50
BUSI70667	Digital Assets	Elective	A	SP	7.50

[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.

BUSI70602	Enterprise Risk Management	Elective	A	SU	7.50
BUSI70603	Entrepreneurial Finance and Venture Capital	Elective	A	SU	7.50
BUSI70658	Fixed Income Securities	Elective	A	SU	7.50
BUSI70098	Global Elective: Corporate Finance for Practitioners	Elective	A	SU	7.50
BUSI70678	Global Elective: Global Markets and Policy for Practitioners	Elective	A	SU	7.50
BUSI70659	Insurance	Elective	A	SU	7.50
BUSI70660	International Finance	Elective	A	SP	7.50
BUSI70661	Machine Learning & Finance	Elective	A	SU	7.50
BUSI70326	Market Microstructure: Trading and Liquidity	Elective	A	SU	7.50
BUSI70663	Private Equity & Venture Capital	Elective	A	SU	7.50
BUSI70609	Quantitative Investment Strategies	Elective	A	SU	7.50
BUSI70618	Real Estate Investment, Finance and Private Equity	Elective	A	SU	7.50
BUSI70714	Reasoning Models and Generative AI in Finance	Elective	A	SP	7.50
BUSI70619	Shareholder Activism and Corporate Responsibility	Elective	A	SU	7.50
BUSI70664	Structured Credit and Equity Products	Elective	A	SU	7.50
BUSI70444	Sustainable Finance	Elective	A	SU	7.50
BUSI70575	Systematic Trading Strategies with Machine Learning Algorithms	Elective	A	SU	7.50
BUSI70591	Text Mining for Economics and Finance	Elective	A	SP	7.50
BUSI70666	Wealth Management & Alternative Investments	Elective	A	SU	7.50
BUSI70635	Applied Project	Elective	B	SU/SUP	7.50
BUSI70642	Applied Project (Work Placement)	Elective	B	SU/SUP	7.50
BUSI70646	Project	Elective	B	SU/SUP	15.00
				Credit Total	90

Programme Structure (16 month) [2] [3]

Year 1&2 - FHEQ Level 7
You will study all compulsory modules. On the Applied Project route, you must select 30 ECTS of electives PLUS the Applied Project and Extended Work Placement modules. On the Research Report route, you must select 22.5 ECTS of electives, PLUS the Extended Work Placement and Project modules.

Code	Module Title	Core/ Compulsory/ Elective	Group*	Term	Credits
BUSI70695	Ethics and Professional Standards in Finance	Required		SU	0.00
BUSI70588	Foundations in Risk Management & Financial Engineering	Compulsory		Sept	7.50
BUSI70607	Financial Statistics	Compulsory		AU	7.50
BUSI70614	Investments and Portfolio Management	Compulsory		AU	7.50
BUSI70631	Stochastic Calculus for Finance	Compulsory		AU	7.50
BUSI70586	Empirical Finance: Methods & Applications	Compulsory		SP	7.50
BUSI70626	Financial Engineering	Compulsory		SP	7.50
BUSI70630	Risk Management and Valuation	Compulsory		SP	7.50
BUSI70650	Advanced Options Theory	Elective	A	SU	7.50
BUSI70567	Applied Quantitative Macro Strategies (suspended for 26.27)	Elective	A	SU	7.50
BUSI70651	Applied Trading Strategies	Elective	A	SU	7.50
BUSI70583	Asset Allocation & Investment Strategies	Elective	A	SP	7.50
BUSI70652	Banks, Regulation & Monetary Policy	Elective	A	SU	7.50
BUSI70584	Big Data in Finance	Elective	A	SP	7.50
BUSI70654	Climate Finance	Elective	A	SP	7.50
BUSI70655	Computational Finance with C++	Elective	A	SU	7.50
BUSI70667	Digital Assets	Elective	A	SP	7.50

[2] **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.

[3] All Business School modules are weighted relative to their ECTS value. The Extended Work Placement module is graded pass/fail and is zero weighted. If passed, the ECTS gained will count towards those required to achieve the target award, but performance in this module will not further affect the degree classification.

BUSI70602	Enterprise Risk Management	Elective	A	SU	7.50
BUSI70603	Entrepreneurial Finance and Venture Capital	Elective	A	SU	7.50
BUSI70658	Fixed Income Securities	Elective	A	SU	7.50
BUSI70098	Global Elective: Corporate Finance for Practitioners	Elective	A	SU	7.50
BUSI70678	Global Elective: Global Markets and Policy for Practitioners	Elective	A	SU	7.50
BUSI70659	Insurance	Elective	A	SU	7.50
BUSI70660	International Finance	Elective	A	SP	7.50
BUSI70661	Machine Learning & Finance	Elective	A	SU	7.50
BUSI70326	Market Microstructure: Trading and Liquidity	Elective	A	SU	7.50
BUSI70663	Private Equity & Venture Capital	Elective	A	SU	7.50
BUSI70609	Quantitative Investment Strategies	Elective	A	SU	7.50
BUSI70618	Real Estate Investment, Finance and Private Equity	Elective	A	SU	7.50
BUSI70714	Reasoning Models and Generative AI in Finance	Elective	A	SP	7.50
BUSI70619	Shareholder Activism and Corporate Responsibility	Elective	A	SU	7.50
BUSI70664	Structured Credit and Equity Products	Elective	A	SU	7.50
BUSI70444	Sustainable Finance	Elective	A	SU	7.50
BUSI70575	Systematic Trading Strategies with Machine Learning Algorithms	Elective	A	SU	7.50
BUSI70591	Text Mining for Economics and Finance	Elective	A	SP	7.50
BUSI70666	Wealth Management & Alternative Investments	Elective	A	SU	7.50
BUSI70635	Applied Project	Elective	B	SU/SUP	7.50
BUSI70559	Extended Work Placement	Elective	C	SU/SUP	30.00
BUSI70646	Project	Elective	B	SU/SUP	15.00
				Credit Total	120

Progression and Classification

Award and Classification for Postgraduate Students

Award of a Postgraduate Degree (including MRes)

To qualify for the award of a postgraduate degree a student 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;

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, your classification will be determined through the Programme Overall Weighted Average meeting the threshold for the relevant classification band.

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

Programme Specific Regulations

N/A

Supporting Information
The Programme Handbook is available at: www.imperial.ac.uk/business-school/programmes/programme-information/
The Module Handbook is made available via the Hub once the module commences. Module descriptions are available in the Programme Handbook (link above).
The university's entry requirements for postgraduate programmes can be found at: www.imperial.ac.uk/study/apply/postgraduate-taught/entry-requirements/
The university's Quality & Enhancement Framework is available at: www.imperial.ac.uk/registry/proceduresandregulations/qualityassurance
The university'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 the university'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/governance/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 you may reasonably be expected to achieve and demonstrate if you 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.