Programme Information		
Programme Title	Programme Code	HECoS Code
Business Analytics and AI	N290T	For Registry Use Only
Business Analytics and AI	N290T2	For Registry Use Only

Award	Length of Study	Mode of Study	Entry Point(s)	Total Credits	
				ECTS	CATS
MSc	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 Awards in Business and Management		
FHEQ Level	Level 7 – Master's		
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
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 Gah-Yi Ban		

Student cohorts covered by specification	2026-27 entry
Date of introduction of programme	October 15
Date of programme specification/revision	July 26

Programme Overview

The MSc in Business Analytics and AI is offered over 12 months full-time starting in September. The programme goal is to enable graduates to understand the challenge of managing large data sets, analyse them to gain business insights, and to provide them with a skill set to meet these challenges. The programme also equips you with core methods in artificial intelligence, including deep learning and emerging generative AI tools, and develops the ability to apply these methods responsibly in business contexts. The programme combines academic rigour and practical relevance. There is a careful balance of teaching and learning, individual and group work. Case study methodology and class-based discussions are used to strengthen the conceptual, analytical and problem-solving skills of the participants in real situations. In addition, there are regular seminars by external expert speakers. The programme prepares graduates for a future of data driven, AI-enabled, and evidence-based decision making. You will learn how to apply the latest academic thinking and analytical, computing and AI tools to help make business decisions, from leading practitioners and world-class faculty.

Although grounded in rigorous technical and quantitative training, our programme is also highly applied. Electives and projects are often sector-focussed, giving you the opportunity to tailor the programme to your interests. You may also select from AI-related electives, and the use of AI tools (e.g., for coding and exploratory analysis) is encouraged across modules.

The programme comprises 9 compulsory modules, and a choice of 6 elective modules from a range of subject areas. These modules are taught over 12 calendar months. Over the normal summer vacation period, you will complete the Analytics in Business Capstone Project (Work Placement/Start-up), Analytics in Business Capstone Project (Consulting Project) or an Individual Research Report. 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. AI-focused or AI-supported projects are welcomed where appropriate.

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.

Learning Outcomes

Students who complete the programme successfully will be able to:

- Create and maintain large data sets.
- Interpret, explain and evaluate large data sets in a business environment.
- Describe, assess and appraise current issues in Business Analytics and AI.
- Develop a set of lifelong learning skills applicable to the business environment.

The Imperial Graduate Attributes are a set of core competencies which we expect you 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 with Honours (or international equivalent) in a quantitative discipline such as: Mathematics Statistics Computer science Engineering Physics A quantitative economics degree

	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	Personal Statement CV Two referees Career Planning Questions
English Language Requirement	Higher requirement (PG) IELTS score of 7.0 overall (minimum 6.5 in all elements).
Admissions Test/Interview	You 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 found at: requested from the Business School's Education Quality Office.

Learning & Teaching Approach

Learning and Teaching Delivery Methods

The programme combines academic rigour and practical relevance. There is a careful balance of teaching and learning, individual and group work.

Independent learning
You are expected to spend significant time on independent study outside of directed learning time on the HUB. This will typically include accessing resources online, reading journal articles and books, undertaking research in the library, reviewing lecture notes and watching lecture recordings, working on individual and group projects, working on coursework assignments and revising for exams.

Active Learning

Projects
You are required to undertake an Analytics in Business Capstone project (either Consulting Project or Work Placement) as the final summative piece of your degree or an Individual Research Report if you wish to pursue further academic study.

Overall Workload
Your overall workload consists of directed online learning sessions and independent learning. While your actual contact hours may vary according to the elective 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.

On average during the programme, you are expected to spend around 20% of your time on directed learning, 60% on independent study and group work, 10% on careers and personal development and 10% of your time on other activities (e.g. social, leisure clubs). There are typically 90 students on the programme and group work is normally conducted in study groups of 3-6 students.

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
- Video Presentations

- Reports
- Simulations
- Case Studies
- Class 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

Balance of assessment

Compulsory modules
Coursework – 45%
Exam – 55%

Electives
Coursework – 100%

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 you or your 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 their 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.

Imperial'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

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		
This section should outline any additional costs relevant to this programme which are not included in students' tuition fees.		
Description	Mandatory/Optional	Approximate cost
Laptop recommended configuration: Core i7 or equivalent, 16GB or more of RAM OS: Windows 11, or Mac iOS 15 or higher	Optional	Varies, depending on exact specification
Global Immersion Elective	Optional	Student contribution fee which historically has been no less than £650-700; this is dependent on delivery costs. Individuals pay for travel and admin costs.
Global Business Challenge Elective	Optional	Student contribution fee which historically has been no less than £650-700; this is dependent on delivery costs. Individuals pay for travel and admin costs.
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 and must choose electives to the value of 30 ECTS from Group A, plus 15 ECTS from Group B.[2][3]

Code	Module Title	Core/ Elective/ Compulsory	Group	Term	Credits
BUSI70201	Essential Maths, Statistics and Finance for Analytics	Compulsory		AU	5
BUSI70262	Maths and Statistics Foundations for Analytics	Compulsory		AU	5
BUSI70253	Data Structures and Algorithms	Compulsory		AU	5
BUSI70257	Fundamentals of Database Technologies	Compulsory		AU	5
BUSI70264	Optimisation and Decision Models	Compulsory		AU	5
BUSI70266	Statistics and Econometrics	Compulsory		AU	5
BUSI70261	Machine Learning	Compulsory		SP	5
BUSI70622	Deep Learning and Generative AI	Compulsory		SP	5
BUSI70267	Data Wrangling and Visualisation	Compulsory		SP	5
BUSI70441	Causal Modelling for Business Analytics	Elective	A	SP	5
BUSI70470	Text Analysis for Business	Elective	A	SP	5
BUSI70255	Energy Analytics	Elective	A	SU	5
BUSI70260	Logistics and Supply Chain Analytics	Elective	A	SP	5
BUSI70265	Retail and Marketing Analytics	Elective	A	SU	5
BUSI70250	Advanced Machine Learning	Elective	A	SP	5
BUSI70707	Adaptive AI: Learning-Powered Decision Making in Practice	Elective	A	SU	5
BUSI70709	Building AI Accelerated Startups	Elective	A	SU	5
BUSI70254	Analytics for Digital Marketing and Platforms	Elective	A	SP	5
BUSI70258	Healthcare and Medical Analytics	Elective	A	SU	5
BUSI70256	Financial Analytics	Elective	A	SU	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.

[2] The BUSI70201 Essentials of Maths, Stats and Finance for Analytics and BUSI70473 Analytics in Business Capstone Project (Work Placement/Start-up) modules are each graded pass/fail and are zero weighted. If passed, the ECTS gained will count towards those required to achieve the target award, but performance in these modules will not further affect the degree classification.

[3] All Business school modules are weighted relative to their ECTS value.

BUSI70455	Leadership in Analytics	Elective	A	SP	5
BUSI70263	Networks: Science, Markets and Optimisation	Elective	A	SP	5
BUSI70252	Data Management and Ethics	Elective	A	SP	5
BUSI70571	Generative AI and Large Language Models	Elective	A	SU	5
BUSI70494	Global Business Challenge (Entrepreneurship)	Elective	A	SP	5
BUSI70413	Global Business Challenge (Social Impact)	Elective	A	SP	5
BUSI70045	Global Immersion	Elective	A	SP/SU	5
BUSI70251	Analytics & AI in Business Capstone Project (Consulting Project)	Elective	B	SP/SU/SUP	15
BUSI70473	Analytics & AI in Business Capstone Project (Work Placement/Start-up)	Elective	B	SP/SU/SUP	15
BUSI70259	Individual Research Report	Elective	B	SUP	15
				Credit Total	90

Programme Structure (16 month)[4]					
Year 1&2 - FHEQ Level 7 **You will study all compulsory modules and must choose electives to the value of 35 ECTS, plus the Extended Work Placement.[5][6]**					
Code	Module Title	Core/ Elective/ Compulsory	Group	Term	Credits
BUSI70201	Essential Maths, Statistics and Finance for Analytics	Compulsory		AU	5
BUSI70262	Maths and Statistics Foundations for Analytics	Compulsory		AU	5
BUSI70253	Data Structures and Algorithms	Compulsory		AU	5
BUSI70257	Fundamentals of Database Technologies	Compulsory		AU	5
BUSI70264	Optimisation and Decision Models	Compulsory		AU	5
BUSI70266	Statistics and Econometrics	Compulsory		AU	5
BUSI70261	Machine Learning	Compulsory		SP	5
BUSI70622	Deep Learning and Generative AI	Compulsory		SP	5
BUSI70267	Data Wrangling and Visualisation	Compulsory		SP	5
BUSI70441	Causal Modelling for Business Analytics	Elective	A	SP	5
BUSI70470	Text Analysis for Business	Elective	A	SP	5
BUSI70255	Energy Analytics	Elective	A	SU	5
BUSI70260	Logistics and Supply Chain Analytics	Elective	A	SP	5
BUSI70265	Retail and Marketing Analytics	Elective	A	SU	5
BUSI70250	Advanced Machine Learning	Elective	A	SP	5
BUSI70707	Adaptive AI: Learning-Powered Decision Making in Practice	Elective	A	SU	5
BUSI70709	Building AI Accelerated Startups	Elective	A	SU	5
BUSI70254	Analytics for Digital Marketing and Platforms	Elective	A	SP	5
BUSI70258	Healthcare and Medical Analytics	Elective	A	SU	5
BUSI70256	Financial Analytics	Elective	A	SU	5

[4] **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.

[5] The BUSI70201 Essentials of Maths, Stats and Finance for Analytics and BUSI70430 Extended Work Placement modules are each graded pass/fail and are zero weighted. If passed, the ECTS gained will count towards those required to achieve the target award, but performance in these modules will not further affect the degree classification.

[6] All Business school modules are weighted relative to their ECTS value.

BUSI70455	Leadership in Analytics	Elective	A	Sp	5
BUSI70263	Networks: Science, Markets and Optimisation	Elective	A	SP	5
BUSI70252	Data Management and Ethics	Elective	A	SP	5
BUSI70571	Generative AI and Large Language Models	Elective	A	SU	5
BUSI70494	Global Business Challenge (Entrepreneurship)	Elective	A	SP	5
BUSI70413	Global Business Challenge (Social Impact)	Elective	A	SP	5
BUSI70045	Global Immersion	Elective	A	SP/SU	5
BUSI70430	Extended Work Placement	Compulsory		SUP/AU	40
				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: https://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).
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
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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.