

| Programme Information | | |
|---|----------------|-----------------------|
| Programme Title | Programme Code | HECoS Code |
| Business Analytics (online delivery, part-time) | N290S | For Registry Use Only |

| Award | Length of Study | Mode of Study | Entry Point(s) | Total Credits | |
|----------------|-----------------|---------------|-----------------------|---------------|------|
| | | | | ECTS | CATS |
| MSc | 24 -36 months | Part-time | Annually in September | 90 | 180 |
| PG Diploma | N/A | N/A | N/A | 60 | 120 |
| PG Certificate | N/A | N/A | N/A | 30 | 60 |

You must apply to and join the MSc. The PG Diploma and PG Certificate are exit awards and not available for entry.

| Ownership | | | |
|----------------------|-----------------------------------|---------------------------|----------------------------------|
| Awarding Institution | Imperial College London | Faculty | Imperial College Business School |
| Teaching Institution | Imperial College London | Department | Imperial College 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: | 2025 (expected) |
| External Accreditor 2: | AACSB International | | |
| Accreditation received: | 2012 | Accreditation renewal: | 2028 (expected) |

| Collaborative Provision | | | |
|-------------------------|--------------------|--------------------------|-----------------------|
| Collaborative partner | Collaboration type | Agreement effective date | Agreement expiry date |

| | | | |
|--|-----|--------------------------|-----|
| N/A | N/A | N/A | N/A |
| Specification Details | | | |
| Programme Lead | | Professor Kalyan Talluri | |
| Student cohorts covered by specification | | 2023-24 entry | |
| Date of introduction of programme | | October 18 | |
| Date of programme specification/revision | | July 23 | |

Programme Overview

The MSc in Business Analytics (online) is a part-time programme that is delivered in a distance learning format. The programme goal is to enable graduates to understand the challenge of managing large data sets, analyse them to gain insights for a firm, and to provide them with a skill set to meet this challenge. The programme combines academic rigour and practical relevance. There is a careful balance of teaching and learning, individual and group work. Large data sets, programming skills, hands-on coursework and discussions (via the VLE) are used to strengthen the conceptual, analytical and problem-solving skills of the participants in real situations. The programme prepares graduates for a future of data driven and evidence-based decision making. You will learn how to apply the latest academic thinking and analytical and computing tools to help make business decisions, from leading practitioners and world-class faculty.

The programme is designed to be able to be completed within 24 months, but has an extended 36 month option to allow you to complete the programme at your own pace. Initial enrolment is on the full MSc programme, however it is recognised that circumstances may change for part-time students and exit points are offered upon completion of 30 ECTS (PG Certificate) or 60 ECTS (PG Diploma). You must successfully complete all 6 compulsory modules to be eligible for the PG Certificate exit award, and an additional 6 elective modules for the PG Diploma award. The maximum period of registration for either exit award is 36 months.

Although grounded in rigorous technical and quantitative training, the programme is also highly applied. Electives and projects are sector-focussed, giving you the opportunity to tailor the programme to your interests.

The programme comprises 6 compulsory modules, and a choice of 9 elective modules from a range of subject areas. These modules are taught over a minimum of 24 calendar months. During the final 3 months, you will complete the Analytics in Business Capstone Project (Analytics Project), Analytics in Business Project (Work-based Project) or an Individual Research Report.

*students choosing to leave the programme at either exit award points, may have the opportunity to re-enter the programme at a later date, but should be aware that maximum periods of registration apply.

Learning Outcomes

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

- Comprehend the foundational mathematical and statistical concepts behind data and business analytics.
- Create and manipulate and visualize data.
- Develop skills to use modelling, optimisation and machine learning to critically analyse data.
- Develop programming skills and the ability to “data wrangle” and visualise data. Understand and implement some commonly used data structures.
- Develop intellectual, cognitive and transferable skills such as communication and analysis of data, theory and evidence.
- Apply innovative and creative thinking and problem-solving skills to complex, ambiguous, uncertain, and systemic problems. Explore, define and reframe problems, and generate solutions or alternative approaches for existing ones.

Upon successful completion of the postgraduate diploma, you will additionally be able to:

- Demonstrate understanding of industry-specific datasets, business analytical questions and use data and analytical tools to answer questions.
- Deepen methodological knowledge of business analytical tools.

Upon completion of the masters award, you will additionally be able to:

- Demonstrate ability to develop projects and present findings based on data.
- Do independent research and literature search and write a comprehensive analytics report.

The Imperial Graduate Attributes are a set of core competencies which we expect students to achieve through completion of any Imperial College degree programme. The Graduate Attributes are available at: www.imperial.ac.uk/students/academic-support/graduate-attributes

Entry Requirements

| | |
|------------------------------|--|
| Academic Requirement | <p>Normally an Upper Second Class Honours Degree with Honours (or international equivalent) in a quantitative discipline such as:</p> <p>Mathematics Statistics Computer science Engineering Physics A quantitative economics degree</p> <p>However, we may consider candidates applying with non-traditional qualifications and backgrounds, on the basis of highly relevant work experience or demonstrated interest. If a less quantitative degree background we advise the GMAT or GRE test to demonstrate quantitative ability.</p> <p>The Business School does not award credit for Prior Learning (Recognition of Prior Certified Learning (RPCL) or Recognition of Prior Experiential Learning (RPEL)).</p> |
| Non-academic Requirements | <p>Personal Statement CV Two referees Career Planning Questions</p> |
| English Language Requirement | <p>Higher requirement (PG) IELTS score of 7.0 overall (minimum 6.5 in all elements).</p> |
| Admissions Test/Interview | <p>You are required to take an online interview via the Kira Talent platform. All interviews are reviewed and scored as part of the Admissions process.</p> |

The programme's competency standards documents can be requested from the Education Quality team.

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

All students are required to undertake the Analytics in Business Capstone project (either Analytics Project or Work-based Project) as the final summative piece of their degree or an Individual Research Report for those wishing 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 1125 hours per year.

On average during the two years of the programme, you are expected to spend around 20% of your time on directed learning, 70% on independent study and group work, 5% on careers and personal development and 5% of their time on other activities (e.g. social, leisure clubs). There are typically 80 students per cohort on the programme and group work is normally conducted in syndicate teams 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 (core) modules

Coursework 65%
Exam - 35%

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 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 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 College'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 College'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 College'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 |
|---------------------------------|--------------------|------------------------|
| On Campus Week, July First Year | Mandatory | Own housing and travel |

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.

Year 1 - FHEQ Level 7**You will study all compulsory modules. You must select 15 ECTS of electives in year 1.**

| Code | Module Title | Compulsory/ Elective | Group | Term | Credits |
|--------------|--|-------------------------|-------|------|---------|
| BUSI70070 | Plagiarism Awareness | Required | | Sept | 0 |
| BUSI70201 | Essentials of Maths, Stats and Finance for Analytics | Compulsory | | AU | 5 |
| BUSI70216 | Maths and Statistics Foundations for Analytics | Compulsory | | AU | 5 |
| BUSI70207 | Data Structures and Algorithms | Compulsory | | AU | 5 |
| BUSI70218 | Optimisation & Decision Models | Compulsory | | SP | 5 |
| BUSI70220 | Statistics & Econometrics | Compulsory | | SP | 5 |
| BUSI70215 | Machine Learning | Compulsory | | SU | 5 |
| BUSI70211 | Fundamentals of Database Technologies | Elective | | SU | 5 |
| BUSI70217 | Network Analytics | Elective | | SP | 5 |
| BUSI70445 | Decision Analytics | Elective | | SP | 5 |
| BUSI70189 | Data Analytics and Visualisations for Business | Elective | | SU | 5 |
| BUSI70222 | Workforce Analytics | Elective | | SU | 5 |
| BUSI70455 | Leadership in Analytics | Elective | | SU | 5 |
| Credit Total | | | | | 45 |

Year 2 - FHEQ Level 7**You must select 30 ECTS of electives plus either the Analytics Project, Work-based Project or Individual Research Report.¹**

| Code | Module Title | Compulsory/ Elective | Group | Term | Credits |
|-----------|---|-------------------------|-------|------|---------|
| BUSI70211 | Fundamentals of Database Technologies | Elective | | SU | 5 |
| BUSI70217 | Network Analytics | Elective | | SP | 5 |
| BUSI70445 | Decision Analytics | Elective | | SP | 5 |
| BUSI70472 | Data Analytics and Visualisation for Business | Elective | | SU | 5 |
| BUSI70455 | Leadership in Analytics | Elective | | SU | 5 |
| BUSI70214 | Logistics & Supply Chain Analytics | Elective | | AU | 5 |
| BUSI70212 | Healthcare & Medical Analytics | Elective | | SU | 5 |
| BUSI70209 | Energy Analytics | Elective | | SP | 5 |

¹ The Work-based Project module is graded pass/fail and 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.

| | | | | | |
|--------------|---|----------|--|----|----|
| BUSI70208 | Digital Marketing Analytics | Elective | | SU | 5 |
| BUSI70219 | Retail & Marketing Analytics | Elective | | SP | 5 |
| BUSI70204 | Advanced Machine Learning | Elective | | AU | 5 |
| BUSI70061 | Market Research | Elective | | SP | 5 |
| BUSI70081 | Strategic Market Management | Elective | | AU | 5 |
| BUSI97787 | Business Problem Solving (not running in 2023-24) | Elective | | SU | 5 |
| BUSI70035 | Emerging Technologies in Marketing | Elective | | SU | 5 |
| BUSI70210 | Financial Analytics | Elective | | SU | 5 |
| BUSI70206 | Analytics in Business Capstone Project (Analytics Project) | Elective | | SU | 15 |
| BUSI70440 | Analytics in Business Capstone Project (Work-based Project) | Elective | | SU | 15 |
| BUSI70213 | Individual Research Report | Elective | | SU | 15 |
| Credit Total | | | | | 45 |

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;

Exit Awards:

Award of a Postgraduate Certificate (PG Cert)

To qualify for the award of a postgraduate certificate you must have a minimum of 30 credits at Level 7 (this may include a maximum of 10 credits from Level 6 where this is approved as part of the award).

Award of a Postgraduate Diploma (PG Dip)

To qualify for the award of a postgraduate diploma you must have passed 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).

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

Classification of Postgraduate Taught Awards

The College 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).

The College's entry requirements for postgraduate programmes can be found at: www.imperial.ac.uk/study/pg/apply/requirements

The College's Quality & Enhancement Framework is available at: www.imperial.ac.uk/registry/proceduresandregulations/qualityassurance

The College's Academic and Examination Regulations can be found at: www.imperial.ac.uk/about/governance/academic-governance/regulations

Imperial College 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 College's Centenary, 8th July 2007, established the College as a University with the name and style of "The Imperial College of Science, Technology and Medicine".

www.imperial.ac.uk/admin-services/secretariat/college-governance/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.