Postgraduate Programme Specification
MSc in Applied Business Analytics

This specification provides a summary of the main features of the programme and learning outcomes that a student might reasonably be expected to achieve and demonstrate where full advantage is taken of all learning opportunities offered. Further details on the learning, teaching and assessment approach for the programme and modules can be accessed on the University website and Virtual Learning Environment, GCU Learn. All programmes of the University are subject to the University's Quality Assurance processes.

1. GENERAL INFORMATION				
Programme Title	Master of Science in Applied Business Analytics			
Final Award	Master of Science in Applied Business Analytics			
Awarding Body	Glasgow Caledonian University			
School	Glasgow School for Business and Society (GSBS)			
Department	Accounting, Finance, and Risk			
Mode of Study	Full-time Part-time Online Distance Learning			
Location of Delivery	Glasgow Campus London Campus			
UCAS Code				
Accreditations (PSRB)				
Period of Approval	From:	January 2026	To:	December 2030

2. EDUCATIONAL AIMS OF PROGRAMME

The MSc in Applied Business Analytics has been developed in response to the evolving demands of the business environment and the corresponding shift in higher education towards more professionally oriented, skills-based programmes. With rapid technological advances and the growing strategic importance of data, organisations increasingly require professionals who can generate, interpret, and apply data-driven insights across all functional areas. This programme title intentionally highlights its applied focus, distinguishing it from more theoretical or generic analytics degrees. By embedding experiential learning, and real-world data projects, this programme aims to equip students with the practical capabilities needed to engage directly with complex business problems and analytics tools, bridging the gap between academic theory and workplace application.

From a pedagogical standpoint, the emphasis on applied learning responds to both academic research and employer expectations. Students are not only taught analytical methods and technologies but also how to implement them in organisational settings, delivering insights that drive operational efficiency, customer engagement, and strategic decision-making. Graduates will be capable of using analytics to enhance productivity, personalise marketing, optimise HR practices, and support long-term planning through forecasting and risk analysis. As such, the programme supports capability building in data-informed decision-making, ensuring students develop the skills needed to add immediate value in a range of sectors and respond effectively to dynamic market challenges.

Aim:
The main purpose of the programme is to equip students with the skills to prepare and manage analytics projects, assess the wider legal, ethical, social, and organisational aspects of data processes, establish, and lead analytics teams, and serve as the bridge between the technical departments developing applications and the leadership in the organisations they support.

Upon successful completion students will be able to:

1. Critically analyse and evaluate complex data analytics projects in business and management, demonstrating a deep understanding of their methodologies and implications.
2. Synthesise and integrate knowledge specific to business and management activities with legal, ethical, social, and organisational dimensions to make informed decisions in the context of data analytics.
3. Demonstrate the ability to plan and lead business analytics teams, employing advanced leadership strategies and practices.
4. Manage and evaluate the effectiveness of data-driven applications developed by technologies-support departments, applying advanced expertise in the interface role between technical development and business needs

3. LEARNING OUTCOMES

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills, qualities and other attributes in the following areas:

A: Knowledge and understanding;

A1 Plan and implement strategies to collect, curate, and critically analyse large and complex datasets using various statistical and machine learning techniques, and extract meaningful insights to make data-driven recommendations for decision-making

A2 Construct, deploy, and evaluate predictive models to forecast future trends, behaviours, and outcomes: select appropriate algorithms, evaluate model performance, and refine models for accuracy

A3 Critically apply optimisation and simulation techniques to recommend actions and strategies that can lead to improved business outcomes, as well as demonstrating expertise to solve complex business problems and provide actionable solutions

A4 Synthesise information and translate technical findings into actionable insights for non-technical stakeholders by creating data visualisations, reports, and presentations to convey complex information clearly and persuasively

A5 Develop an in-depth understanding of data ethics, privacy regulations, and data governance principles, and apply this to data security, integrity, and compliance within an organisation whilst maximising the value of data assets

B: Practice: Applied knowledge, skills and understanding;

B1 Managing datasets, demonstrating advanced knowledge and competence in the required techniques (collection, cleaning, storage, cataloguing, securing, monitoring, etc.)

B2 Applying advanced analytical skills to large datasets, understanding their relevance and implications within business scenarios

B3 Identifying and recognising diverse business contexts in which comprehensive data and advanced analytics are pivotal, demonstrating an in-depth understanding of their strategic importance.

B4 Critical understanding of the contextual issues (economic, social, cultural, and political) shaping the evolution of the digital economy

B5 Critically evaluate the diverse roles that business analytics assume across a spectrum of organisational structures and sectors

C: Generic cognitive skills;

C1 Employing diverse methods to integrate, analyse, and assess new or abstract data and scenarios, and transforming this information and ideas into strategic solutions

C2 Applying conceptual, analytical, and quantitative aptitude to inform decision-making processes

C3 Presenting information in a clear, professional manner

C4 Systematically and creatively applying analytical methods to inform business decisions, effectively conveying the results with clarity and persuasiveness

C5 Creating inventive and pragmatic solutions for intricate business problems.

D: Communication, numeracy and ICT skills

D1 Proficient communication in diverse contexts: conveying ideas effectively through presentations, computer-based media, and written reports

D2 Critical evidence evaluation: assessing evidence for reliability, validity, and significance in decision-making.

D3 Cross-disciplinary problem-solving: applying techniques and solutions across different fields.

D4 Effectively using Information and Communications Technology

D5 Resource and time management: efficiently allocating resources and time to achieve objectives

E: Autonomy, accountability and working with others.

E1 Take responsibility for own work, behave ethically with a strong sense of social responsibility

E2 Self-appraise evaluate and critically reflect on own work

E3 Demonstrate initiative and work independently in a wide range of situations

E4 Plan and organise activities, collecting and organising information

E5 Work creatively with others and in teams and take leadership roles where appropriate

E6 Enhance their career prospects by appreciating the complexity and similarity of the way finance and financial technology is implemented in different parts of the world

4. LEARNING AND TEACHING METHODS

The programme provides a variety of learning and teaching methods. Programme and Module specific guidance will provide detail of the learning and teaching methods specific to each module.

Across the programme the learning and teaching methods and approaches may include the following:

- Lectures
- Seminars
- Practical classes
- Placements
- Simulation experiences
- Groupwork

- Flipped classroom approaches
- Online learning

The above approaches may be delivered either in person or online as appropriate and determined at module level by the Module Leader.

5. ASSESSMENT METHODS

The programme provides a variety of formative and summative assessment methods. Programme and Module specific guidance will provide detail of the assessment methods specific to each module.

Across the programme the assessment methods may include the following:

- Written coursework (essays, reports, case studies, dissertation, literature review)
- Oral coursework (presentations, structured conversations)
- Practical Assessment (Placement, VIVA, Laboratory work)
- Group work
- Blogs and Wikis
- Portfolio Presentations
- Formal Examinations and Class Tests

The above assessments may be delivered either in person and online as appropriate and determined at module level by the Module Leader.

6. ENTRY REQUIREMENTS

Specific entry requirements for this programme can be found on the prospectus and study pages on the GCU website at this location: www.gcu.ac.uk/study

The Course webpage specific to this Programme is: https://www.gcu.ac.uk/study/courses/msc-applied-business-analytics-glasgow

All students entering the programme are required to adhere to the GCU Code of Student Conduct.

7. PROGRAMME STRUCTURE AND AVAILABLE AND FINAL EXIT AWARDS[1]

The following modules are delivered as part of this programme:

Module Code	Module Title	Core or Optional	SCQF Level	Credit Size	Coursework %	Examination %	Practical %
MMI430813	AI and Business Analytics	CORE	11	15		50	50
MMI330815	Data Programming for Business Decision-Making	CORE	11	15		50	50
MMI230818	Strategic Data Analysis for Business Management*	CORE	11	15		40	60
MMI230814	Business Optimisation Techniques*	CORE	11	15		40	60
MMI230817	Predictive Intelligence for Business Management*	CORE	11	15		40	60
MMI230816	Data Visualisation for Business Analytics*	CORE	11	15	30		70
MMI226823	Data Ethics and Research Methods	CORE	11	15	30		70
MMN330819	Research Methods for Finance and Analytics	CORE	11	15		40	60
MMN630209	Developing Leadership for the Common Good	CORE	11	15	100		
MMN330820	Finance and Analytics Research Project	CORE	11	45	100		

Students undertaking the programme on a full-time basis commencing in September of each year will undertake the modules in the order presented above. This may be subject to variation for students commencing the programme at other times of year (e.g. January) and/or undertaking the programme on a part-time or distance learning mode of delivery.

The following final and early Exit Awards are available from this programme[2]:

Postgraduate Certificate (un-named) - *achieved upon successful completion of 60 credits (excluding the Dissertation / Project Module)*

Postgraduate Certificate in Applied Business Analytics- *achieved upon successful completion of 60 credits which must include the modules asterisked above*

Postgraduate Diploma in Applied Business Analytics- *achieved upon successful completion of 120 credits which must include the modules asterisked above*

[1] Periodically, programmes and modules may be subject to change or cancellation. Further information on this can be found on the GCU website here: https://www.gcu.ac.uk/currentstudents/essentials/policiesandprocedures

[2] Please refer to the GCU Qualifications Framework for the minimum credits required for each level of award and the Programme Handbook for requirements on any specified or prohibited module combinations for each award.

Master of Science in Applied Business Analytics- *achieved upon successful completion of 180 credits which must include the modules asterisked above*

8. ASSESSMENT REGULATIONS

Students should expect to complete their programme of study under the GCU Assessment Regulations that were in place at the commencement of their studies on that programme, unless proposed changes to University Regulations are advantageous to students. These can be found at: https://www.gcu.ac.uk/aboutgcu/services-and-facilities/qualityassuranceandenhancement/regulations-and-policies

VERSION CONTROL (to be completed in line with AQPP processes)
Any changes to the PSP must be recorded below by the programme team to ensure accuracy of the programme of study being offered.

Version Number	*Changes/Updates*	*Date Changes/Updates made*	*Date Effective From*
1.0	PSP created as part of new programme approval	Sept 25	Jan 26