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| Course Title | MSc Business and Data Analytics |
| Final Award | MSc Business and Data Analytics |
| Interim Awards | Postgraduate Certificate of Higher Education in Business and Data Analytics  Postgraduate Diploma of Higher Education in Business and Data Analytics |
| Awarding Body | Ravensbourne University London |
| Teaching Institution | Ravensbourne University London |
| UCAS Code | N/a |
| HECOS code (with Subject percentage Splits if applicable) | 100755 – Data management |
| QAA Subject Benchmark | QAA Subject Benchmark Statement Computing  QAA Master's Degree Characteristics statement |
| External Accrediting Bodies |  |
| Apprenticeship Standard used to inform the development of the course (if applicable) | N/a |
| Accelerated Degree Option | No |
| Level 6 Top Up Option (online only) | No |
| Study Load | Full-time |
| Mode of study | Face-to-face |
| Delivery Location(s) | Ravensbourne University campus |
| Length(s) of Course(s) | 1 Year |
| Type (open/closed) | Open |
| Validation period | Five years |
| Intended First Cohort Start Date | Sep 2025 |
| Date produced/amended | January 2025 |
| Course Leader | TBC |
| Course Development Team Members | Dr Ata Ur Rehman  Dr Oras Baker  Dr Faisal Mustafa |
| Course Administrative Contact | TBC |

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| **Course Description** |
| The MSc in Business & Data Analytics course is designed to equip graduates with the skills to leverage data in making informed business decisions, a key aspect of success in a variety of industries. The integration of advanced data analytics with business acumen ensures that graduates are prepared to address real-world challenges in the relevant industries, particularly in creative art and media industries. Many industries, including media, and technology are still lagging behind in leveraging the power of Artificial Intelligence, Data Science and Data Analysis. Whether it is analysing consumer behaviour in digital media or assessing the financial impact of a new creative project, or driving data-led strategies in finance, technology, and other sectors the course prepares students to unlock insights that are essential for driving innovation and strategic decision-making in creative enterprises.  The MSc Business and Data Analytics course is designed to prepare graduates for the growing demand for professionals who can integrate business strategy with data-driven decision-making. This course combines advanced technical skills in data science, analytics, cloud computing, and artificial intelligence with a strong foundation in business strategy and governance. The course emphasises practical, hands-on learning, allowing students to work with cutting-edge tools. By addressing the needs of industries undergoing digital transformation, the course ensures graduates are equipped to deliver strategic insights and drive innovation across diverse sectors.  With modules covering areas like artificial intelligence, big data technologies, and data governance, the MSc Business and Data Analytics course stands out for its focus on applied learning and real-world relevance. The course also includes a 60-credit final project, where students solve complex, industry-relevant challenges, showcasing their ability to translate data into actionable business strategies. Delivered in the creative and innovative environment of Ravensbourne University London, the course integrates design thinking and collaborative problem-solving approaches, producing graduates who are well-rounded, forward-thinking data analytics professionals ready to make an active contribution to the global marketplace. |

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| **Course Aims** |
| 1. Develop proficiency in advanced data analytics tools, AI, machine learning, and data science techniques to drive strategic business decisions and enhance operational efficiency. |
| 1. Equip students with the skills to critically analyse complex datasets and derive actionable insights for competitive advantage across various industries, including creative sectors. |
| 1. Develop a critical understanding of data-driven business strategies, emphasising predictive analytics, business intelligence, and the application of analytics in innovative and creative contexts. |
| 1. Promote ethical decision-making and adherence to regulatory compliance in data management, analysis, and governance. |
| 1. Explore advanced applications of data analytics in creative industries and environments, focusing on areas like audience insights, digital marketing analytics, and content performance optimisation. |

## **Course Learning Outcomes**

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| The course provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.  On completion of the MSc Business and Data Analyticsstudents will be able to: | |
| Explore | Critically evaluate advanced data science, artificial intelligence, and big data methodologies and tools to justify their selection and implementation in business decision-making, ensuring alignment with industry trends and ethical considerations. |
| Create | Systematically design, develop and analyse innovative data-driven solutions by applying AI, big data, and cloud technologies, integrating ethical data practices and robust analytical frameworks to drive business transformation. |
| Influence | Synthesise data-driven decision-making and artificial intelligence governance principles to lead and enhance business intelligence strategies, fostering collaboration, ethical leadership, and responsible data use within multi-disciplinary environments. |
| Integrate | Demonstrate data analytics mastery by critically applying statistical modelling, data mining, machine learning, and ethical data governance to develop responsible and scalable analytical solutions, leveraging artificial intelligence and automation techniques to enhance decision-making, predictive accuracy, and business performance. |

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| Where a student does not complete the full course, but exits with a Postgraduate Diploma, they will have had the opportunity to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.  On completion of the Postgraduate Diploma in Business and Data Analytics students will be able to: | |
| Explore | Investigate advanced data analytics techniques by applying core concepts of data science, artificial intelligence, big data, and cloud computing to analyse and address business challenges using established methodologies and tools. |
| Create | Develop complex practical data-driven solutions using analytical frameworks, artificial intelligence techniques, and cloud technologies to support business processes and digital transformation. |
| Influence | Systematically apply advanced data analytics, governance principles, and digital strategies to inform business decision-making and enhance organisational performance. |
| Integrate | Implement advanced data science, artificial intelligence, cloud computing, and governance principles to implement effective and ethical solutions that align with business strategies. |

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| Where a student does not complete the full course, but exits with a Postgraduate Certificate, they will have had the opportunity to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.  On completion of the Postgraduate Certificate in Business and Data Analyticsstudents will be able to: | |
| Explore | Critically investigate and apply core data science concepts, big data technologies, and cloud computing techniques to address business challenges. |
| Create | Design advanced practical data-driven solutions using appropriate analytical tools, big data frameworks, and cloud technologies to enhance business processes |
| Influence | Systematically apply data insights and digital strategies to support business decision-making and drive performance improvements. |
| Integrate | Integrate data analytics, big data, and cloud computing principles to support digital transformation initiatives within business contexts. |

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| Ravensbourne University Assessment Criteria | |
| Explore | Research and Analysis  Subject Knowledge  Critical Thinking and Reflection  Problem Solving |
| Create | Ideation  Experimentation  Technical Competence  Communication and Presentation |
| Influence | Social Impact  Ethical Impact  Environmental Impact |
| Integrate | Collaboration  Entrepreneurship and Enterprise  Professional Development |

**Core Competencies**Each module learning outcome should be aligned to at least one competency.

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| **Competency** | **Definition** | **Aligned Assessment Criteria** |
| **Cognitive** | The ability to acquire, retain and use knowledge, recognise, pose and solve problems. Attributes may include:   * Evaluate their own beliefs, biases and assumptions * Evaluate strengths, weaknesses, and fallacies of logic in arguments and information * Apply lesson from the past or learned knowledge and skills to new and varied situations * Perform basic computations or approach practical problems by choosing appropriately from a variety of mathematical techniques * Devise and defend a logical hypothesis to explain observed phenomenon * Recognise a problem and devise and implement a plan of action | **Explore, Create, Integrate, Influence** |
| **Creative** | The ability to generate new ideas, express themselves creatively, innovate and/ or solve complex problems in an original way. | **Create** |
| **Professional** | The ability to understand and effectively meet the expectations of industry partners, through outputs and behaviours. | **Integrate, Influence** |
| **Emotional, Social and Physical** | Emotional -The intrapersonal ability to identify, assess, and regulate one’s own emotions and moods; to discriminate among them and to use this information to guide one’s thinking and actions and where one has to make consequential decisions for oneself. Attributes may include:   * Self-awareness & regulation (including metacognition) * Mindfulness * Cognitive flexibility * Emotional resilience * Motivation * Ethical decision- making   Social - The interpersonal ability to identify & understand the underlying emotions of individuals and groups, enhancing communication efficacy, empathy and influence. Attributes may include:   * Managing your audience * Coordinating with others * Negotiation * Creativity * People management * Leadership & entrepreneurship * Service orientation * Active listening * Coaching and mentoring   Physical - The ability to perceive and optimise physiological activity and responses to influence emotion, solve problems or otherwise effect behaviour. Physical intelligence engages the body to train neuron pathways to help change an inappropriate response to an appropriate response. Attributes may include   * Self-discipline & management * Attention * Reaction & response time * Cognitive & muscle memory * Managing stress * Physical resilience | **Explore, Influence,**  **Integrate** |
| **Cultural** | The capability to relate to and work effectively across cultures including intercultural engagement, cultural understanding and intercultural communication. | **Influence, Integrate** |
| **Enterprise and Entrepreneurial** | The generation and application of ideas within a practical setting. It combines creativity, idea generation and design thinking, with problem identification, problem solving, and innovation followed by practical action. This can, but does not exclusively, lead to venture creation (UK Quality Assurance Agency, Enterprise and Entrepreneurship Education 2018). | **Create, Influence, Integrate** |
| **Digital** | The confident adoption of applications, new devices, software and services and the ability to stay up to date with ICT as it evolves. The ability to deal with failures and problems of ICT and to design and implement solutions (Jisc Digital Capabilities Framework) | **Explore, Create, Integrate, Influence** |
| **Ravensbourne Return** | Engagement with inhouse activities including mentoring other students, volunteering, acting as a student rep or ambassador.  Demonstrate a knowledge of current events and social issues  Identify their personal convictions and explore options for putting these convictions into practice  Engagement with the external community through (from) employment, volunteering, participation in a Professional Life or other programme-based project. | **Explore, Create, Influence, Integrate,** |

**Learning, Teaching and Assessment**

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| **Learning and Teaching methods** | **Assessment Strategy** |
| The Learning and Teaching Methods employed in this course are designed to foster an engaging and dynamic learning environment, ensuring that students not only acquire theoretical knowledge but also develop practical skills and critical thinking abilities. The teaching methods utilised are diverse and tailored to support a variety of learning styles, ensuring inclusivity and accessibility for all students. This course incorporates the consequences of sustainability, legal and ethical principles, and Equality, Diversity and Inclusion (EDI) to ensure students acquire responsible and globally aware professional skills.  Key components of the learning and teaching approach include:  **Lectures and Seminars**: Core content will be delivered through interactive lectures and seminars, where students can engage with the material, ask questions, and participate in discussions. These sessions aim to provide foundational knowledge and facilitate the development of key concepts.  **Active Learning**: In order to promote deeper understanding, the course will incorporate active learning techniques, such as group work, problem-solving exercises and case studies. These activities allow students to apply what they have learned in practical scenarios, enhancing retention and comprehension.  **Blended Learning**: The course will integrate both face-to-face and off-line online learning components. Online resources such as video lectures, reading materials, LinkedIn learning, and discussion forums will be made available to reinforce and extend classroom learning, providing flexibility for students to learn at their own pace.  **Student-Cantered Approach**: The teaching methods prioritise student engagement, with instructors acting as facilitators rather than sole knowledge providers. This approach encourages independent learning, critical thinking, and collaboration among peers, empowering students to take responsibility for their own learning.  **Technology Integration**: The course will utilise digital tools and educational technologies to enhance learning experiences. This includes learning management systems (LMS), collaborative platforms, and multimedia resources to engage students in a variety of ways.  **Real-World Application**: To bridge the gap between theory and practice, the course will include opportunities for students to work on real-world projects, internships, or simulations, allowing them to apply academic knowledge in practical settings. | The Assessment Strategy for this course is designed to ensure that students’ understanding of the material is thoroughly evaluated and that their progress is continuously monitored. A variety of assessment methods will be employed to cater to different learning styles, provide constructive feedback, and enhance the overall learning experience.  Key components of the assessment strategy include:  **Formative Assessments**: These assessments are designed to provide ongoing feedback and support student learning throughout the course. Activities such as quizzes, group discussions, short reflections, and draft submissions allow students to track their progress and identify areas for improvement before final evaluations.  **Summative Assessments**: At the end of key modules or the course, students will be assessed through more formal methods, such as presentations and project reports. These assessments are intended to measure students’ ability to synthesise and apply the knowledge and skills gained throughout the course.  **Peer Assessment**: To promote critical thinking and self-reflection, students may participate in peer assessment activities, where they review and provide feedback on the work of their colleagues. This fosters a collaborative learning environment and helps students refine their analytical and evaluative skills.  **Practical Assessments**: Given the hands-on nature of the course, students may be assessed through practical tasks such as case studies, design projects, or performance evaluations. These assessments ensure that students are able to apply theoretical knowledge in practical settings and demonstrate real-world competency.  **Reflective Assessments**: Students may be required to engage in reflective exercises, such as writing learning journals or completing self-assessments, to encourage personal growth and awareness of their learning process. Reflective assessments support the development of metacognitive skills and foster lifelong learning.  **Continuous Monitoring**: In addition to formal assessments, students will receive regular feedback on their participation in discussions, group work, and other collaborative activities. This ensures that learning is an ongoing process and provides opportunities for improvement throughout the course.  **Grading Criteria**: A clear grading rubric will be provided for all assignments and assessments, outlining the specific criteria and expectations for each task. This transparency ensures that students understand how their work will be evaluated and can strive to meet the required standards.  By utilising a diverse range of assessment methods, the strategy aims to provide a comprehensive understanding of students’ strengths and areas for development, while encouraging a focus on both individual and collaborative learning. |

**Course Structure**

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| Module Code | Module Title | Shared Module | Mandatory / Elective | Credits |
| Level 7 |  |  |  |  |
| XXX | Data Science Concepts |  | Mandatory | 20 |
| XXX | Business Strategy and Digital Transformation | Borrowed  (1) | Mandatory | 20 |
| XXX | Big Data and Cloud Technologies |  | Mandatory | 20 |
|  | ***Level 7 Certificate*** |  |  | ***60*** |
| XXX | Research Methods for Business and Data Analytics |  | Mandatory | 20 |
| XXX | Information Technology Governance and Project Management | Borrowed  (1) | Mandatory | 20 |
| XXX | Artificial Intelligence and Machine Learning | X  (2) | Mandatory | 20 |
|  | ***Level 7 Diploma*** |  |  | ***120*** |
| XXX | Final Project: Business and Data Analytics |  | Mandatory | **60** |
|  |  |  | **Total** | **180** |

1. Borrowed from MSc Information Technology Management
2. Owned by MSc Business and Data Analytics; borrowed by MSc Software Engineering

**Learning Hours**

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| **Learning Hours (per 20 credit module excluding the Work Placement)** | | | |
| **Staff – Student Contact Hours** | | **Independent Study Hours** | |
| Formal Scheduled Teaching | 36 | Independent Study | 164 |
| Supervised access to resources |  | Preparation for Assessment |  |
|  |  | Unsupervised Access to Resources |  |
| **Total** | | 200 | |

**Course Regulations**

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| Entry Requirements | |
| A 2:2 honour’s degree (or higher) from a UK university or an equivalent non-UK qualification and/or a professional qualification in a relevant subject. Prior coding experience in at least one programming language is also a requirement.  If applying directly from an undergraduate degree course without experience or professional practice, you need to show demonstrable knowledge in the relevant subject area.  Candidates with significant professional experience, including in data analytics, along with appropriate references could be considered for entry in this course.  Please refer to the institutional regulations on the expected minimum entry requirements (found under Section 5 of the General Academic Regulations found on the website [here](https://www.ravensbourne.ac.uk/information/current-staff-and-students/staff-and-student-policies%22%20%EF%B7%9FHYPERLINK%20%22https:/www.ravensbourne.ac.uk/information/current-staff-and-students/staff-and-student-policies) and the course page on the Ravensbourne University website [here](https://www.ravensbourne.ac.uk/study/postgraduate/msc-information-technology-management) for course-specific entry requirements.  In order to be eligible for this course, you will need to be a competent speaker and writer of English. If you require a Student Visa you need to provide us with an IELTS or equivalent English language qualification, which demonstrates a minimum of 6.0 (with a minimum of 5.5 in each sub test) or CEFR Level B2 in each component. Please read the English Language requirements or contact postgrad@rave.ac.uk for more information. | |
| Accreditation of Prior Learning (if applicable) | |
| Applications are welcomed from those who may not possess formal entry qualifications, mature students, those with work experience or with qualifications other than those listed above.  Such applicants should demonstrate sufficient aptitude and potential to complete the course successfully. Applicants will be assessed at interview in accordance with Ravensbourne’s Accreditation of Prior Learning Policy and Procedure and Student Transfer Plan. | |
| Conditions for Progression | |
| Students will be deemed to have passed a module if they achieve a 50%.  A student who has passed all assessments to date but has not yet reached the end of a level (or stage) will be permitted to proceed into the following term by the Interim Assessment Board. | |
| Reassessment of Failed Elements | |
| Failure or non-submission in any assessment will result in a Fail grade for the component and module.  A student shall be permitted three attempts at each assessment; one first sit and two resits.  Where a student successfully retrieves an assessment failure, the grade for the assessment will be capped at 50% (except where Extenuating Circumstances have been approved). | |
| Conditions for the Granting of Awards | |
| A student who completes an approved course of study, shall be awarded MSc. Business and Data Analytics  Those students who exit the Course without completing it may be entitled to exit with an award of either   1. Postgraduate Certificate in Business and Data Analytics*,* provided they complete an approved courseof modules and the learning outcomes for such award as set out in the Course Specification. 2. Postgraduate Diploma in Business and Data Analytics, provided they complete an approved courseof modules and the learning outcomes for such award as set out in the Course Specification. | |
| Any derogation(s) from the Regulations required? | |
| *No* | |
| Student Support | To develop an inclusive learning environment and support students' diverse needs, dedicated services are available to assist students, including those with special needs, international students, students with disabilities, and those requiring specific learning adjustments.  Support encompasses academic development workshops, English language enhancement, wellbeing and counselling services, learning support and development, and disability support provisions. Students are encouraged to engage proactively with Student Services at the earliest opportunity to ensure appropriate arrangements are in place to facilitate their academic success.  Further information regarding the range of support services can be accessed via:  <https://www.ravensbourne.ac.uk/student-services> |
| Assessment Regulations | <https://www.ravensbourne.ac.uk/staff-and-student-policies> |

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|  | **Course Learning Outcomes** | **LO1** | **LO2** | **LO3** | **LO4** |
| PGCert | XXX Data Science Concepts | X | X |  | X |
| XXX Business Strategy and Digital Transformation |  | X | X |  |
| XXX Big Data and Cloud Technologies | X | X |  | X |
| PGDip | XXX Research Methods for Business and Data Analytics |  | X | X | X |
| XXX Information Technology Governance and Project Management |  | X | X | X |
| XXX Artificial Intelligence and Machine Learning | X | X |  | X |
| MSc | XXX Final Project: Business and Data Analytics | X | X | X | X |

**Course Diagram**

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| Semester 1 | Semester 2 |
| Data Science Concepts  (20 Credits) | Research Methods for Business and Data Analytics  (20 Credits) |
| Business Strategy and Digital Transformation  (20 Credits) | Information Technology Governance and Project Management  (20 Credits) |
| Big Data and Cloud Technologies  (20 Credits) | Artificial Intelligence and Machine Learning  (20 Credits) |
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| Semester 3 | Final Project: Business and Data Analytics  (60 Credits) |