PROGRAMME SPECIFICATION

Name of Programme:		MSc for IT and Business Data Analysis	
Final award (BSc, MA etc):		MSc	
Awarding institution/body:	University of Buckingham & International Business School (separate degrees)	**Teaching institution:**	International Business School
School of Study:	School of Computing	**Parent Department:** (the department responsible for the administration of the programme)	Collaborations
Length of the programme:	3 semesters	**Method of study:**	Full-time
Framework for Higher Education Qualifications (FHEQ) Level	FHEQ Level 7	**Relevant subject benchmark statement (SBS)**	Master's Degrees in Business and Management (2015) Master's Degrees in Computing (2019)
Professional body accreditation (if applicable):	N/A		
Criteria for admission to the programme:	− Minimum bachelor's degree − Non-native speakers: IELTS: 6.5 or equivalent	**Cohort(s) to which this programme specification is applicable**:(e.g., from 2012 intake onwards)	From September 2020
UCAS Code	N/A		

Summary of Programme

The IBS MSc in IT for Business (Data Analytics) is a one-year, so called “Type 1” graduate programme designed for career development, ideal for those who possess a bachelor level qualification in any field.

The programme’s goal is to (re-)train young professionals, who will be able to occupy junior software developer/business analyst positions, thanks to their ability to perform various coding tasks and simultaneously interpret business information and identify business insights. The programme will therefore be a conversion programme addressed to young people seeking career advancement or career change and will train IT professionals with strong business foundations.

The first part of the programme focuses on delivering solid foundations in business and accounting as well as laying the fundamentals in the development of computer applications. The second part of the programme builds on the previous part both regarding the business skills and knowledge (soft and numerical skills development, discussion of the use of data in real business situations) and the computing skills and knowledge (data analysis and automation). Finally, in the third semester, students learn about the latest trends (like the use of big data and machine learning tools) and complete a major real-life project work. Throughout the programme the focus will be on putting their knowledge and skills into context, by applying their freshly acquired coding skills to real life business analysis issues.

Educational Aims of the Programme

The specific aims of the programme are the following:

- After completing this programme students will be able to:
- apply contemporary data analysis tools and techniques to define, interpret, analyse and solve complex business problems;
- assist the managerial decision-making process through extracting valuable information and business insights from various datasets.
- start and advance their careers through performing various business problem related coding tasks;
- communicate complex ideas effectively and engage with stakeholders seamlessly.

<table>
<tr><th colspan="3"><u>Programme Outcomes</u></th></tr>
<tr><td rowspan="2"><u>Knowledge and understanding of:</u>
On successful completion of the programme, students should be able to:

1. create programming codes that execute analytical tasks in business settings;
2. manage, manipulate and analyse large sets of data using contemporary technologies and tools;
3. critically discuss managerial issues in relation to the use of data in the decision-making process of businesses;
4. critically assess the importance and the feasibility of data-driven managerial initiatives and convincingly present the findings to a large array of stakeholders;
5. create simple machine learning models and analyse their impact on business decision-making processes;
6. critically assess automation opportunities in a professional context.</td><td>→</td><td><u>Teaching/Learning Strategy</u>
Explain the teaching and learning methods and strategies used to help students achieve each part of the knowledge and understanding

− The flipped classroom will be widely used during the programme. This concept enables a problem-based approach in class, whereby students will have the opportunity to work on real-life scenarios and case studies, practice problem solving and critical peer-review skills, along with teamwork and collaboration skills and techniques. This includes various workshops, simulations, presentations and group assignments, along with computer lab sessions and in certain cases, field visits and guest lectures.
− Students will be required to watch online presentations, read texts, professional and academic journal articles, work through case studies provided by the Seminar Leaders, engage in online discussion with their peers through various channels (including Moodle and the various online collaboration tools, like the ones offered by Google). The content will be designed to be engaging and enable a practice-based learning experience.</td></tr>
<tr><td>→</td><td><u>Assessment Strategy:</u>

Explain the strategies used to assess the achievement of each part of the knowledge and understanding

− Coursework and continuous in-class assessment,
− Individual Assignments,
− Individual presentations,
− Examinations,
− Coding Project</td></tr>
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<tr><th colspan="3"><u>Programme Outcomes</u></th></tr>
<tr><td rowspan="2"><u>Cognitive (thinking) skills:</u>
On successful completion of the programme, students should be able to:

1. critically assess the opportunities to introduce software-based solutions in various business scenarios across major functional areas including finance, marketing and CRM;
2. demonstrate solid skills in advising solutions to complex problems regardless of subject boundaries through methodical analysis and critical assessment;
3. exhibit an innovative, out-of-the-box approach and creativity in dealing with multi-stakeholder and/or data-based projects.</td><td>→</td><td><u>Teaching/Learning Strategy:</u>
Explain the teaching and learning methods and strategies used to help students achieve each part of the cognitive skills

− Problem-based approach in interactive seminars, where students are constantly engaged and challenged to bring their own ideas, viewpoints and concepts to the table;
− Peer-review opportunities will regularly be a part of seminars.</td></tr>
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Individual Assignments,
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<tr><td rowspan="2"><u>Practical skills (subject specific):</u>
On successful completion of the programme, students should be able to:

1. Coding skills: an ability to write, review, assess code using a contemporary language/technology.
2. Analytical skills: conduct research and enquiry into business and management issues, synthesise data from various sources and formulate reports and recommendations.
3. Data management skills: demonstrate strong research and data management skills and an ability to assess and clean large datasets.
4. Oral and written communication skills: ability to communicate effectively in both writing and orally using a range of media.</td><td>→</td><td><u>Teaching/Learning Strategy:</u>
Explain the teaching and learning methods and strategies used to help students achieve each part of the practical/transferable skills

− Coding skills are at the forefront of the programme – students' development is aided by mentors and experts in the field with a constant opportunity to request feedback both in-class and online.
− Oral and written communication skills and pwresentation skills will be practiced in the interactive seminars, where students will be expected to regularly participate in open discussion and debates, formulate opinion and present them individually and in groups, deliver presentations and briefings to culturally diverse audiences, and write theoretical essays or business reports in a professional manner.
− Analytical and data management skills will be strengthened by engaging online preparation material and a solid practice-based approach in computer lab sessions. Students will be expected to have their own equipment, while access to online platforms will be provided by International Business School.</td></tr>
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Explain the strategies used to assess the achievement of each part of the practical/transferable skills

Coursework and continuous in-class assessment,
Individual assignments,
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<tr><td rowspan="2"><u>Transferable skills (generic):</u>
On successful completion of the programme, students should be able to:

1. Independent learning and lifelong learning skills: demonstrate strong individual reading and learning skills for advanced academic study and lifelong learning.
2. Quantitative and numerical skills: perform standard and some advanced mathematical and statistical tasks relevant to various professional contexts.
3. Problem-solving skills: recognise, analyse and solve problems, make decisions in complex situations and unpredictable contexts.
4. Entrepreneurship skills: demonstrate an ability to design and validate business concepts and communicate results effectively to a wide variety of audiences.</td><td>→</td><td><u>Teaching/Learning Strategy:</u>
Explain the teaching and learning methods and strategies used to help students achieve each part of the practical/transferable skills

− Problem-solving skills are curated through various interactive assignments and simulations. Students are expected to take active part in the seminars and discussion and also complement their learning experience with guided learning, reading, and case study analysis.
− Entrepreneurial skills will be developed through mentoring, workshops and opportunities to participate at various events where students can showcase their talent and concepts.
− Students will regularly engage in projects that require teamwork and a collaborative approach: ranging from group assignments, group presentations, role play and drama pedagogy elements, students will be expected to take part in the guided activities in-class.</td></tr>
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Explain the strategies used to assess the achievement of each part of the practical/transferable skills

Coursework and continuous in-class assessment,
Individual assignments,
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External Reference Points
The following reference points were used in designing the programme:
− Framework for Higher Education Qualifications: http://www.qaa.ac.uk/Publications/InformationAndGuidance/Pages/quality-code-A1.aspx − Relevant Subject Benchmark Statement(s): http://www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code/subject-benchmark-statements
Please note: This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each course unit/module can be found in the departmental or programme handbook. The accuracy of the information contained in this document is reviewed annually by the University of Buckingham and may be checked by the Quality Assurance Agency.