## **Programme Specification**

MSc Information Management and Digital Business

# For students entering in September 2019

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# This document sets out key information about your Programme and forms part of your Terms and Conditions with the University of Reading.

| Awarding Institution  | University of Reading  |
|-----------------------|--|
| Teaching Institution  | University of Reading  |
| Length of Programme   | 12 Months full time, 36 months part-time   |
| Accreditation         | BCS, <i>The Chartered Institute for IT</i> , Practitioner Certificate in Business Analysis Practice through one of the modules |
| Programme Start Dates | September  |

# Programme information and content

This programme aims to equip students with key knowledge and skills to design and develop business solutions that involve the alignment of business strategy and technology. Placing 'informatics' – the study of the creation, management and utilisation of information in scientific and economic activities – at its core, it covers business analysis and information and communications technologies (ICT) solutions design to enable students to analyse the problem domain, capture requirements, propose solutions, and evaluate their implications. It treats business and organisation activities as informational and combines conceptual underpinnings based on semiotics and appraisal of information systems and technologies in business, organisational and societal contexts. The programme offers specialisation through the following pathways: Business Service Design, Digital Innovation, Big Data in Business, and Digital Health and Data Analytics.

Business Service Design: This pathway prepares students for strategic use of information and information management for business service design. Service design focuses on business services rather than products or components to achieve composable and agile solutions that lead to service innovation. It also addresses management and leadership issues in service design. Students will be able to apply their knowledge and skills in designing and introducing technology based solutions to application domains in business and management.

Digital Innovation: This pathway equips students with knowledge, skills and tools to lead, manage, develop, and implement innovative digital business solutions. Students learn to develop a strategic approach and apply appropriate theories and models to create new business value, by exploring how digital technology innovations and leadership can be harnessed to strategically organise and lead people and technology in a digital environment. The pathway develops sought after graduates who are able to identify and pioneer new strategic digital business opportunities from inception through the application of existing and new cutting edge technologies and innovations.

Big Data in Business: This pathway prepares students with knowledge, skills and awareness about the strategic use of very large amounts of data that are constantly being generated – often referred to as 'Big Data' – in business. Use of ICT and cognate technologies in data analytics and processing have enabled organisations to gather a large volume of data. However, without a strategic view to take advantage of the opportunity created by the availability of such data, organisations and businesses would not be able to capitalise on this competitive advantage. In this pathway, students learn to develop a strategic approach to manage Big Data in business, through the analysis of business problems as well as understanding approaches to business intelligence. It intends to produce graduates who have knowledge and skills necessary to understand how Big Data can benefit business and organisations.

Digital Heath and Data Analytics: With the digitalisation in health industry and large amount of data generated in healthcare service, skills of using digital technology and data analytics to extract insights are critical in the delivery of health and social care, organisation management, health innovation development, as well as regional and national policy shaping. This pathway equips students with health informatics knowledge and hands-on data analytic skills to leverage information technology, data analytics and artificial intelligence (AI) in healthcare service delivery, clinical research, hospital operational management and public health.

#### Transferable skills

In parallel to subject competence that students are required to acquire from their programme of study, they are expected to enhance their research ability, team work, communication skills, information handling, problem- solving, project management, creativity, and analytical skills. This is achieved through a mix of different methods of teaching and learning (lecture/practical, classroom-based/problem-based, theory-oriented/skill-focused) and different methods of assessments (examination/coursework). A key part of the study programme is the MSc dissertation project, in which students will be trained and assessed as specified in the module specification in most of the transferable skills (e.g. independent research, critical analysis and project planning and management).

#### Module information

The programme comprises of 180 credits, allocated across a range of compulsory and optional modules. Compulsory modules are listed.

# **Compulsory Modules:**

| Module | Name                                      | Credits | Level |
|--------|---|---------|-------|
| INMR91 | Business Informatics                      | 20      | 7     |
| INMR95 | Business Data Analytics                   | 20      | 7     |
| INMR66 | Business Domain and Requirements Analysis | 20      | 7     |

## **Compulsory text:**

A student must complete all compulsory modules listed above, and also compulsory modules for each pathway as listed below. The topic of the dissertation project should normally be in the chosen pathway domain.

#### PATHWAYS:

In addition to the compulsory modules above, for the pathway Business Service design:

| Module | Name                                      | Credits | Level |
|--------|---|---------|-------|
| INMR92 | Business Service Design                   | 20      | 7     |
| INMR65 | IT Project Management                     | 20      | 7     |
| INMR90 | MSc Dissertation (Information Management) | 40      | 7     |

The remaining credits will be taken from the list of optional modules from the School of Business Informatics System and Accounting or from an approved list of modules from across the University.

# In addition to the compulsory modules above, for the pathway Digital Innovation:

| Module | Name                                      | Credits | Level |
|--------|---|---------|-------|
| INMR93 | Digital Innovation                        | 20      | 7     |
| INMR94 | Digital Leadership                        | 20      | 7     |
| INMR90 | MSc Dissertation (Information Management) | 40      | 7     |

The remaining credits will be taken from the list of optional modules from the School of Business Informatics System and Accounting or from an approved list of modules from across the University.

# In addition to the compulsory modules above, for the pathway Big Data in Business:

| Module | Name                                      | Credits | Level |
|--------|---|---------|-------|
| INMR77 | Business Intelligence and Data Mining     | 20      | 7     |
| INMR89 | Big Data in Business                      | 20      | 7     |
| INMR90 | MSc Dissertation (Information Management) | 40      | 7     |

The remaining credits will be taken from the list of optional modules from the School of Business Informatics System and Accounting or from an approved list of modules from across the University.

# In addition to the compulsory modules above, for the pathway Digital Health and Data Analytics:

| Module | Name                                  | Credits | Level |
|--------|---------------------------------------|---------|-------|
| INMR96 | Digital Heath and Data Analytics      | 20      | 7     |
| INMR77 | Business Intelligence and Data Mining | 20      | 7     |

|        | MSc Dissertation (Digital Heath and Data |    |   |
|--------|--|----|---|
| INMR97 | Analytics)                               | 40 | 7 |

The remaining credits will be taken from the list of optional modules from the School of Business Informatics System and Accounting or from an approved list of modules from across the University.

## Part-time or flexible modular arrangements

This programme may be studied part-time over three consecutive years. A student may undertake an optional module at any time, without necessarily being constrained by the completion of core modules.

## Additional costs of the programme

Additional programme costs the student may incur- e.g textbooks, travel costs to placements, software etc are estimated to be between £300 and £500.

Costs are indicative and may vary according to optional modules chosen and are subject to inflation and other price fluctuations.

The estimates were calculated in 2018.

## **Optional modules:**

The optional modules available can vary from year to year. An indicative list of the range of optional modules for your Programme is set out in the Further Programme Information. Details of any additional costs associated with the optional modules, will be made available to you prior to the beginning of the programme. Entry to optional modules will be at the discretion of the University and subject to availability. Although the University tries to ensure you are able to take the optional modules in which you have expressed interest this cannot be guaranteed.

### **Placement opportunities**

Students may carry out their dissertation projects in organisations as part of placement of up to six months in duration. The placement needs to be arranged by students and requires an approval by the Programme Director who ensures that the placement satisfy the requirements of Dissertation.

## **Teaching and learning delivery:**

All the modules may be delivered by a mix of lectures, tutorials and practicals. The support learning will be in forms of email, bulletin board, electronic discussion forum and employment of other e-learning technologies. An assessment of a module will take place at the end of each module.

Total study hours for your programme will be 1800 hours. The contact hours for your programme will depend upon your module combination; an average for a typical set of taught modules on this programme is 30 hours. In addition to your scheduled contact hours, you will be expected to undertake guided independent study. Information about module contact hours and the amount of independent study which a student is normally expected to undertake for a module is indicated in the relevant module description.

#### Accreditation details

Students who pass the module INMR66 Business Domain and Requirements Analysis with the mark of 60 or above will be eligible for BCS *The Chartered Institute for IT* Practitioner Certificate in Business Analysis Practice.

#### Assessment

The programme will be assessed through a combination of written examinations, coursework (including class tests) and oral examinations. Further information is contained in the individual module descriptions.

# Progression

A student may undertake an optional module at any time, without necessarily being constrained by the completion of core modules.

## Part-time and modular progression requirements

None

#### Classification

The University's taught postgraduate marks classification is as follows:

# Mark Interpretation

70 - 100% Distinction

60 - 69% Merit

50 - 59% Good standard (Pass)

#### Failing categories:

40 - 49% Work below threshold standard

0 - 39% Unsatisfactory Work

For Masters Degree

# To qualify for **Distinction**, students must

(i) gain an overall average of 70 or more over 180 credits; and

- (ii) a mark of 60 or more for the dissertation; and
- (iii) the total credit value of all modules marked below 50 must not exceed 55 credits; and
- (iv) students must not have any mark below 40.

## To qualify for **Merit**, students must

- (i) gain an overall average of 60 or more over 180 credits; and
- (ii) a mark of 50 or more for the dissertation; and
- (iii) the total credit value of all modules marked below 50 must not exceed 55 credits; and
- (iv)students must not have any mark below 40.

## To qualify for **Passed**, students must

- (i) gain an overall average of 50 or more over 180 credits; and
- (ii) a mark of 50 or more for the dissertation; and
- (iii) the total credit value of all modules marked below 50 must not exceed 55 credits; and
- (iv) the total credit value of all modules marked below 40 must not exceed 30 credits.

# For PG Diploma

## To qualify for **Distinction**, students must

- (i) gain an overall average of 70 or more over 120 credits; and
- (ii) In addition, the total credit value of all modules marked below 50 must not exceed 55 credits; and
- (iii) students must not have any mark below 40.

## To qualify for **Merit**, students must

- (i) gain an overall average of 60 or more over 120 credits; and
- (ii) the total credit value of all modules marked below 50 must not exceed 55 credits; and
- (iii) students must not have any mark below 40.

### To qualify for **Passed**, students must

- (i) gain an overall average of 50 or more over 120 credits; and
- (ii) the total credit value of all modules marked below 50 must not exceed 55 credits; and
- (iii) the total credit value of all modules marked below 40 must not exceed 30 credits.

## For PG Certificate

# To qualify for a **Postgraduate Certificate**, students must

- (i) gain an overall average of 50 or more over 60 credits; and
- (ii) the total credit value of all modules marked below 40 must not exceed 10 credits.