## **Programme Specification**

MSc Digital and Technology Solutions (part-time) PPTZDTSOHGHM MSc Digital and Technology Solutions (Degree Apprenticeship: Corporate - Open) PATZDTSOZZBM

## For students entering in 2024/25

# 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	MSc Digital and Technology Solutions (part-time) - 21 months MSc Digital and Technology Solutions (Degree Apprenticeship: Corporate - Open) - 21 months	
Accreditation	<ul> <li>Tech Partnership Industry Gold Accreditation</li> <li>Association to Advance Collegiate Schools of Business (AACSB)</li> <li>EFMD Quality Improvement System (EQUIS)</li> </ul>	
Programme Start Dates	Multiple throughout the academic year.	
QAA Subject Benchmarking Group	Business and Management	

# Programme information and content

The proposed programme is MSc Digital & Technology Solutions which offers two possible pathways: Degree apprenticeship pathway (based Level 7 Standard for Digital and Technology Solutions Specialist) and part time MSc pathway. It aims to equip students with knowledge and skills to investigate, identify and implement digital and technological strategic solutions through technology leadership. It covers essential knowledge, skills and behaviours to lead digital technology provision, to understand organisation goals, strategies and practices and to implement technological strategic solutions. This programme will prepare the students to be digital & technology solution specialists who are confident, competent and capable individuals who can apply leadership and change management skills in digital transformation process. The programme has two technical specialisms: data analytics and IT strategy specialism for both degree apprenticeship and part-time MSc pathways. Students on the Apprenticeship Degree pathway have to complete the Apprenticeship End Point Assessment, in addition to the MSc qualification requirements, in order to be awarded the MSc Digital and Technology Solutions Specialist degree.

**Specialism 1 – Data analytics**: This specialism equips student with knowledge and skills to investigate business data requirements, and applies data selection, data curation, data quality assurance, data investigation and engineering techniques. It includes understanding of data nature through data and quality management; data driven innovation through conducting high-quality complex investigations, employing a range of analytical software, statistical modelling and machine learning to solve commercial problems; and data-driven strategy

focusing on the strategic use of data analytics in business, analysing business and technological requirement to create value through big data technologies and assessing the legal and ethical implications of data analytics in business.

**Specialism 2 – IT strategy**: This specialism equips student knowledge and skills to drive digital initiatives and implement IT strategy to help transform their operating model through the delivery of technology-based change initiatives. It includes the capability of managing strategic alignment of business and IT capabilities to deliver and support strategic plans for implementing information technologies; conducting digital change and selecting appropriate tools and engaging with senior stakeholders to formulate digital strategy; and digital engagement exploring the principles of consulting and digital technology strategy and problem solving methods in conjunction with digital roadmap techniques.

# Transferable skills:

In parallel to subject competence that students are required to acquire from their programme of study, they are expected to enhance their work-based learning and research ability, teamwork, 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, online learning, work-based learning, classroom-based/problem-based, theory-oriented/skill-focused) and different methods of assessments (examination/coursework). In particular, the students are expected to achieve leadership skills to promote a high level of cooperation between their own work group and other groups to establish a technology change led culture; to develop and support others in developing an appropriate balance of leadership and technical skills and to create strong positive relationships with team members to produce high performing technical teams.

## **Programme Learning Outcomes**

-MSc Digital and Technology Solutions (part-time)

During the course of the Programme, you will have the opportunity to develop a range of skills, knowledge and attributes (known as learning outcomes) For this programme, these are:

#### Learning outcomes

- 1 Demonstrate a developed knowledge of informatics and digital technologies, showing competency at analysing how they support business processes.
- Describe technology road mapping including implementing strategies and digital 2 transformation plans, and examine how they achieve improved productivity,
- functionality and end user experience.
- Develop skills to plan and implement technology based business changes, applying them to deliver effective transformation in the workplace through establishing clear
- <sup>o</sup> objectives, discerning priorities and setting out responsibilities in collaboration with others.
- Analyse the strategic importance of technology enabled business processes, and how they are designed and managed to determine a firm's ability to compete effectively.
- 5 Synthesise business transformation and how organisations integrate different management functions in the context of technological change.

6 Reflect critically on your ability and leadership to deliver digital transformation in contemporary organisations.

<sup>7</sup>Communicate the digital solutions and transformation strategies and key performance outcomes with team members with different backgrounds effectively

8 Demonstrate empathy and motivate others to deliver collaborative, high-quality technical solutions and outcomes within organisational contexts.

You will be expected to engage in learning activities to achieve these Programme learning outcomes. Assessment of your modules will reflect these learning outcomes and test how far you have met the requirements for your degree.

To pass the Programme, you will be required to meet the progression or accreditation and award criteria set out below.

#### Module information

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

# Compulsory modules

Module	Name	Credits	Level
MQM1DIN	Digital Innovation	20	Μ
MQM1IIO	Informatics in Organisations	20	M
MQM1LDO	Leading in the Digital Organisation	20	M
MQM3CSP	Capstone Project	60	M

A student must complete all compulsory modules listed above, and compulsory modules for the chosen specialism as listed below. The topic of the MSc Project should normally be in the chosen specialism domain.

## Specialism 1 – Data analytics

In addition to the compulsory core modules in section 1 above, compulsory modules for the Data analytics specialism are:

Module	Name	Credits	Level
MQM2DAS	Data management	20	7
MQM2DTM	Business Data Analytics	20	7
MQM2BDA	Data Analytics Strategy in Business	20	7

## Specialism 2 – IT strategy

In addition to the compulsory modules above, compulsory modules for the IT strategy specialism are:

Module	Name	Credits	Level
MQM2MSA	Managing strategic alignment of business and IT	20	7

MQM2DBS	Digital business strategy	20	7
MQM2STC	Strategic technology consulting	20	7

#### Part-time or flexible modular arrangements

This programme is for part-time work-based students, designed to be completed in 21 months (21 + 3 months for the Degree Apprenticeship pathway).

#### Placement opportunities

Student will carry out work-based learning during modules and projects as the students are already employed. The knowledge and skills learned in the modules will be reflected in work and the project will be related to work and business tasks at the employer's premise.

#### Study abroad opportunities

N/A

## **Optional modules**

There are no optional modules but students have an opportunity to choose between two specialisms to customise their learning and development.

## **Teaching and learning delivery**

The programme includes part-time study over a period of two years. All the modules will be delivered by a mix of online learning, lectures and tutorials. The support learning will be in forms of academic/apprentice tutor support, email, bulletin board, electronic discussion forum and employment of other e-learning technologies.

Total study hours for the programme is 1800 hours. The contact hours will depend upon the module combination; an average for a typical set of face-to-face taught modules on this programme is 14 hours. In addition to scheduled contact hours, students 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.

Elements of your programme will be delivered via digital technology.

The scheduled teaching and learning activity hours and amount of technology enhanced learning activity for your programme will depend upon your module combination. In addition, you will undertake some self-scheduled teaching and learning activities, designed by and/or involving staff, which give some flexibility for you to choose when to complete them. You will also be expected to undertake guided independent study. Information about module study hours including 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

Tech Industry Gold Accreditation

Association to Advance Collegiate Schools of Business (AACSB)

EFMD Quality Improvement System (EQUIS)

#### Assessment

Assessment of knowledge and understanding of learning outcomes and behavioural skills is achieved via both summative and formative assessment. The following form the options used for assessment:

- Individual written assignments
- Presentations, individual or group
- Reflective learning assignment
- Exams
- Individual or group projects

A final management project, which is an individual research project most often undertaken within the student's own organisation. The research methods and study skills module is an integral part of this project and leads to the development of a mandatory proposal for the final management project.

## Progression

Students must pass each module with a minimum mark of 50%. All modules are regarded as being of special significance. It is normally expected that all the modules in each stage are completed prior to entry to the next stage of the programme. Requests for extensions of assessment deadlines will be based on provision of evidence in line with the University Engagement Policy (

<u>http://www.reading.ac.uk/web/files/qualitysupport/academicengagement\_fitnesstostudy.pdf</u>). A student may be withdrawn due to lack of engagement, which is at the discretion of the Programme Director.

Students who fail to achieve a 50% pass mark are permitted one re-sit/resubmission per module at an appropriate point in the programme schedule.

Re-sits or resubmissions will be capped at 50% at module level. Programme Management will advise students when a re-sit and resubmission is required and policy regarding timing. The normal procedure on extenuating circumstances will apply to those seeking an extension for a re-sit and resubmission. If a student does not resubmit or re-sit within the specified time from the first assessment without an agreed extenuating circumstance a mark of zero will be awarded for that assessment.

Students who fail to achieve a 50% pass mark on a module that is assessed via multiple modes of assessment will be re-assessed by a single mode of assessment. In this case the resit mark will count as an overall module mark and will be capped at 50%.

## Assessment for Apprenticeship Degree Pathway: Level 7 Digital and Technology Solutions Specialist (Integrated Degree) Apprenticeship Standard

In addition to the assessment and progression requirements above, students enrolled on the Apprenticeship Degree pathway will also have to complete successfully the End Point Assessment as specified in the Level 7 Digital and Technology Solutions Specialist (Integrated Degree) Apprenticeship Standard.

Successful completion of the End Point Assessment is mandatory requirement for completion and award of the MSc Digital and Technology Solutions Specialist degree.

There are two parts to the end-point assessment:

1) A Project Report (a written account of a set of practical tasks undertaken within a workbased project context), which the independent assessor assesses and grades.

2) A Professional Discussion (a structured discussion with the independent assessor allowing the apprentice to respond to questions using a portfolio), which the independent assessor assesses and grades.

The final overall apprenticeship grading is achieved by combining the grading results from the two end-point assessment methods as follows:

Project Report	<b>Professional Discussion</b>	Overall EPA Grade
Pass	Pass	Pass
Pass	Merit	Pass
Pass	Distinction	Pass
Merit	Pass	Merit
Merit	Merit	Merit
Merit	Distinction	Merit
Distinction	Pass	Merit
Distinction	Merit	Distinction
Distinction	Distinction	Distinction

The degree apprenticeship standard (Digital technology and solutions) provides definitions of a fail, pass, merit or distinction for each method.

https://www.instituteforapprenticeships.org/media/1966/st0482\_digital-technologysolutions-specialist\_17\_ap-final-for-publishing.pdf

# **Classification for the Master Degree**

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 a Master's Degree

To attain the Master students must gain a mark of at least 50% (or more) in each module

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 MSc Project.

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 MSc Project.

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 MSc Project

## For PG Diploma

To qualify for Distinction, students must

i. gain an overall average of 70 or more over 120 credits

To qualify for Merit, students must

i. gain an overall average of 60 or more over 120 credits

To qualify for Passed, students must

i. gain an overall average of 50 or more over 120 credits

# For PG Certificate

To qualify for a Postgraduate Certificate, students must

i. gain an overall average of 50 or more over 60 credits

There are three stages in this programme:

- Stage 1 (30 weeks): 3 compulsory modules
- Stage 2 (30 weeks): 3 specialism modules
- Stage 3 (24 weeks): Work-based project

Students may exit Stage 1 with a Postgraduate Certificate and Stage 2 with a Postgraduate Diploma.

## Additional costs of the programme

The core textbooks / e-books are provided and students are encouraged to discuss the purchase of additional textbooks or other resources with the module convenor before purchasing. Some books may be available second-hand, which will reduce costs.

A range of resources to support your curriculum, including textbooks, electronic resources and computer facilities, are available through the Central Library and the Business School Academic Resource Centre.

Printing and photocopying facilities are available on campus at a cost per A4 page of  $\pm 0.05$  (black and white) and  $\pm 0.30$  (colour). Essential costs in this area will be low as most coursework is submitted electronically.

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

#### For further information about your Programme please refer to the Programme Handbook and the relevant module descriptions, which are available at <u>http://www.reading.ac.uk/module/</u>. The Programme Handbook and the relevant module descriptions do not form part of your Terms and Conditions with the University of Reading.

MSc Digital and Technology Solutions (part-time) for students entering in session 2024/25 15 December 2023

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