Course Specification

MSc Data Science

Course Code: MDATS

2026/27

MSc Data Science (MDATS)

Applicant Facing Course Specification for 2026/27 Postgraduate Entrants

Confirmed at

General Information

Award	Master of Science Data Science
Contained Awards	Postgraduate Diploma Data Science
	Postgraduate Certificate Data Science
Awarding Body	Leeds Beckett University
Level of Qualification and Credits	Level 7 of the Framework for Higher Education Qualifications, with 180 credit points at Level 7 of the Higher Education Credit Framework for England.
Course Lengths and Standard Timescales	Start dates will be notified to students via their offer letter. The length and mode of delivery of the course is confirmed below: • 12 months (full time, campus based) September starts • 15 months (full time, campus based) January starts • 24 months (full time, with optional 30 week work placement) • 24 months (part time, campus based)
Part Time Study	PT delivery is usually at half the intensity of the FT equivalent course, although there may be flexibility to increase your pace of study to shorten the overall course duration. Some modules may be delivered in a different sequence to that defined within this information set but the modules offered within each level are consistent. Please note that the work placement option is not generally available to PT students.
Location(s) of Delivery	The majority of teaching will be at Headingley campus but on occasion may be at City campus.
Entry Requirements	Admissions criteria are confirmed in your offer letter. Details of how the University recognises prior learning and supports credit transfer are located here: https://www.leedsbeckett.ac.uk/student-information/course-information/recognition-of-prior-learning/

Admissions enquiries may be directed to: AdmissionsEnquiries@leedsbeckett.ac.uk.

| Course Fees | Course fees are confirmed in your offer letter. A breakdown of any additional costs is included on the online prospectus entry for this course. |

Fees enquiries may be directed to Fees@leedsbeckett.ac.uk.

Policies, Standards and Regulations (www.leedsbeckett.ac.uk/academicregulations)

There are no additional or non-standard regulations which relate to your course.

Professional Accreditation or Recognition Associated with the Course

Professional Body

The British Computer Society (BCS)

Accreditation/ Recognition Summary

The BCS (The Chartered Institute for IT) accreditation is an indicator of quality of curriculum, teaching and resources. Accredited courses have been independently recognised as having met high standards. BCS accreditation means that the course offers thorough grounding in the subject area and with emphasis on professional aspects to work in the field.

'In Year' Work Placement Information (for September starters only)

Summary

The course contains a placement year.

30 weeks, undertaken between taught curriculum and the Dissertation

Placement Delivery

Leeds Beckett is dedicated to improving the employability of our students and one of the ways in which we do this is to support our students to gain valuable work experience through work based placements. Our Placements team have developed strong links with companies, many of whom repeatedly recruit our students into excellent placement roles. Our team is dedicated to supporting students through every stage of the placement process.

Location

Students are responsible for obtaining their own placement, with assistance from the University. The locations will vary, dependant on the opportunity.

Approval

Whilst students source their own placements, they will need to meet requirements which will be outlined before module enrolment.

Timetable Information

Timetables for Semester 1 will be made available to students during induction week via:

    i)   The Student Portal (MyBeckett)

    ii)   The Leeds Beckett app

Any difficulties relating to timetabled sessions may be discussed with your Course Administrator.

Key Contacts

Your Course Director	Dr Jackie Campbell
Your Course Administrator	Jake Wrigglesworth - J.Wrigglesworth@leedsbeckett.ac.uk

Course Overview

Aims

The aims of the programme are to:

Develop data understanding alongside crucial theoretical principles in data analytics, strategy and data governance. In practical terms, data science is conducted by data managers who are part business-minded, part manager, part technologist and part data scientist. The role of these managers therefore falls into the following respective domains:

- As business-people, data managers are articulate, good communicators, presentable and have contact with the day-to-day business managers and their customers. They are primarily concerned with the information needed for activities such as strategic planning, production planning, market research, financial planning, product knowledge, legislation, archiving, competitive analysis etc. They understand the potential, the tools and techniques to analyse the data and how best to present the information.

- As managers, they run businesses within businesses and are concerned with people, budgets and projects. They therefore need to deal with financial planning, human resource management, project management, technology planning, communications, decision analysis and control systems.

- As technologists, data managers are skilled in managing information technology and understanding big data. They need to know about technology, systems and how they work, what the latest trends

are and the impact of it on the working environment. They also bridge the gap between "real technologists" and end users.

- As data scientists, data managers are able to think critically about the data, are skilled in activities such as information collection, analysis and presentation alongside the legal, ethical and data governance issues.

Our students may be working in one of these roles and looking to gain a wider appreciation, perhaps as part of their career strategy. The course outcomes develop all of these roles, the core modules provide a generic overview in information, data management and systems with option modules allowing the student to find a route that suits their own skills, aspirations and interest area. The dissertation/project allows for a specific area to be investigated deeply. The Project Management module ensures that all students graduate with skills enabling them to manage people and projects as would be expected from this MSc

Course Learning Outcomes

At the end of the course, students will be able to:

1	Demonstrate a systematic understanding of knowledge, and a critical awareness of current ethical, data governance and security problems and/or new insights, associated with the exploitation of information services and resources in organisations and to support collection, sorting and ordering of data, big data and information in an organisation.
2	Critically evaluate and demonstrate originality and current research in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge about data and data management and management of computer systems which capture, process and transmit data.
3	Deal with complex business issues both systematically and creatively, make informed professional judgements in the absence of complete data and information, implement and communicate their conclusions clearly to specialist and non-specialist audiences.
4	Take responsibility for continuing to advance their knowledge and understanding, and to develop new skills to a high level – both generally (as appropriate to the holder of a masters level award) and specifically as related to the field of data science.

Teaching and Learning Activities

Summary

The MSc Data Science course has been developed using the University Education strategy and stipulates that "Leeds Beckett aims to be an excellent, accessible, globally engaged university contributing positively to a thriving Northern economy. Our Mission is to ensure we use our knowledge and resources to make a positive and decisive difference to people, communities and organisations." Our objective is to provide an **Excellent Education and Experience** to all our students. This is achieved on the MSc Data Science course by:

- Ensuring the curriculum is relevant – we include Guest Lectures from local Companies in the area. Recently NHS Digital gave a talk on their Data Warehouse and Price Waterhouse gave a Guest Lecture on a project they are doing for the University around student attrition. Globally active research staff ensure new applications and innovations are represented.

- Ensuring the students are supported – the post graduate courses have a small number of students on them and a core staff team. We aim to create a strong course identity via a shared understanding of the course aims, outcomes and expectations. Students are made aware of how to contact us, via drop in sessions, email and assessment feedback opportunities. The postgraduate lab is available solely for them to ensure they have space to meet with each other. It is well used. We arrange social events and encourage social networking.

- Ensuring the teaching methods are appropriate. Leeds Beckett has been awarded "silver" status in the National Teaching Excellence Framework (TEF) results. The University is active in its research into Education and shares and supports staff in the design and delivery of modules. The postgraduate progression, engagement and feedback rates for this course are excellent.

The Course employs a wide range of learning opportunities and teaching methods, informed by curriculum review, research-based pedagogical approaches and continuous staff development. Innovative approaches to teaching, learning and assessment include the use of simulations, case studies, projects, practical work, work-based learning, formative face-to-face and online collaborative discussion, collaborative and applied learning, projects, and practitioner informed teaching and student-led learning. Regular team meetings ensure that tutors are able to share and develop their understanding of the parts of the course in which they are not directly involved and understand the students' profile better.

Scheduled sessions include the use of lectures, seminars, tutorials and practical laboratory sessions. Advantage is taken of both technology and supportive activities to ensure that effective learning takes place.

Students, on and off-campus are able to engage with the course director and module leaders through the pre-assigned availability times and social activities organised twice a year. A Facebook group and discussion boards within modules will allow them to develop supportive networks with other peers, as does the designated Postgraduate lab. Opportunities to celebrate the postgraduate students' achievements include the Postgraduate Showcase of project work and the Postgraduate Research Conference.

Your Modules

This information is correct for students progressing through the programme within standard timescales. Option modules listed are indicative of a typical year. There may be some variance in the availability of option modules. Students who are required to undertake repeat study may be taught alternate modules which meet the overall course learning outcomes. Details of module delivery will be provided in your timetable.

This course will feature a mix of blended learning, both online and in-person. Lectures and seminars will be delivered live and also be recorded.

Full Time Delivery

Level 7

Compulsory modules

Module title	Credits	Semester/ teaching period
Data Analytics and Visualisation	20	S1
Research Practice	20	S1
Database Systems and Approaches	20	S2
Project Management	20	S2
Dissertation	60	S3
Number of credits of compulsory modules	140	

*Placement module on sandwich version of the course

Option modules

Module title	Credits	Semester/ teaching period
Data Warehouse Models and Approaches	20	S1
Managing Information in the Digital and Global Environment	20	S1
Critical Perspectives on Information	20	S2
Intelligent Systems and Machine Learning	20	S2
Number of credits of option modules a student should choose	40	

Part Time Delivery

Level 7

Compulsory modules

Module title	Credits	Semester/ teaching period
Data Analytics and Visualisation	20	S1 / Year 1
Research Practice	20	S1 / Year 1
Database Systems and Approaches	20	S2 / Year 1
Project Management	20	S4 / Year 2
Dissertation	60	S5 / Year 2
Number of credits of compulsory modules	140	

Option modules

Module title	Credits	Semester/ teaching period
Data Warehouse Models and Approaches	20	S3 / Year 2
Managing Information in the Digital and Global Environment	20	S3 / Year 2
Critical Perspectives on Information	20	S4 / Year 2

| Intelligent Systems and Machine Learning | 20 | S4 / Year 2 |
| Number of credits of option modules a student should choose | 40 | |

***Students on the part time route would be expected to take 3 modules in the year (rather than the 6 modules on the full time route)

There is flexibility with this, they can take 2 modules each semester if they choose and start the dissertation in 'Semester 4' or take one module in one semester and two in the next and start the Dissertation in 'Semester 5'.

An example is given above.

As for full time students, the order of the modules will be slightly different depending on whether they are September or January starters.

Assessment Balance and Scheduled Learning and Teaching Activities

The assessment balance and overall workload associated with this course are calculated from core modules and typical option module choices undertaken by students on the course. They have been reviewed and confirmed as representative by the Course Director but applicants should note that the specific option choices students make may influence both assessment and workload balance.

A standard module equates to 200 notional learning hours, which may be comprised of teaching, learning and assessment, any embedded placement activities and independent study. Modules may have more than one component of assessment.

Assessment

On this course students will be assessed predominantly by coursework, with a focus on practical skills development, with some supervised tests. There is a major independent study module which will require the production of a dissertation.

Workload

Overall Workload	
Teaching, Learning and Assessment	211 hours
Independent Study	1589 hours
Placement (optional)	30 weeks