



**LEEDS  
BECKETT  
UNIVERSITY**

## Course information for applicants

This information applies to the course as it will be delivered to students starting the course in 2027/28.

Information provided here was confirmed on 24/08/2026

## General information

### Programme code

MAIDS

### Target award

If you complete this course successfully you will be eligible for the award of:

MSc AI and Data Science

### Delivery mode

- ☒ On campus  
☐ Distance learning

### Where you will study

The majority of teaching will be at Headingley campus but on occasion may be at City campus.

### Awarding body

Leeds Beckett University

### Regulator

Office for Students

### Level of qualification

Level 7 of the Framework for Higher Education Qualifications

### Course duration

If you are made an offer of a place on the course, your offer letter will include the start date.

This course can be studied:

12 months, full-time

24 months, part-time

### Part-time study

This course can be studied part-time.

If you study the course part-time, it will usually take twice as long to complete compared with the equivalent full-time course. The modules may be delivered in a different sequence than on the full-time course, but you will study the same modules at each academic level. With the agreement of the course team, you may be able to increase your pace of study to shorten the overall course duration.

## Entry requirements

Admissions criteria are available on the online prospectus entry for this course.

If you have previous relevant qualifications or experience, you could be exempt from certain parts of your course. Recognition of prior learning (RPL) allows you to start your course at a point appropriate to the learning and skills that you may have developed in a professional, vocational or community setting.

Find out more here: <https://www.leedsbeckett.ac.uk/student-information/course-information/recognition-of-prior-learning>

If you have questions about entry requirements and admissions, contact [AdmissionsEnquiries@leedsbeckett.ac.uk](mailto:AdmissionsEnquiries@leedsbeckett.ac.uk)

## Course fees

Course fees and a breakdown of any additional costs is included on the online prospectus entry for this course.

If you have questions about fees for this course, contact [Fees@leedsbeckett.ac.uk](mailto:Fees@leedsbeckett.ac.uk)

## Timetable

You will receive your full timetable for the year during induction week.

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# What you will study

## Course aims

The MSc in Artificial Intelligence and Data Science is designed to enable graduates from a wide range of academic disciplines to transition into the rapidly evolving fields of AI and data science. The programme provides a solid foundation in key technical areas, including programming, data management, AI, machine learning, and deep learning, while embedding a critical understanding of ethical and societal considerations. All modules are core, ensuring a coherent and comprehensive learning experience that supports students in developing the competencies required for professional practice.

Through applied learning and research-led teaching, students gain the ability to design, implement, and evaluate intelligent systems and data pipelines. They develop fluency in industry-standard tools and frameworks, and learn to critically assess algorithms, data sources, and model outputs. The course also emphasises interdisciplinary collaboration and communication, preparing students to work effectively in diverse teams and to articulate complex technical concepts to both specialist and non-specialist audiences.

The programme culminates in an independent project, allowing students to explore a specialist area in depth and contribute original insights to the field. With strong links to Leeds' growing digital sector and national strategies promoting ethical and inclusive innovation, graduates are well-positioned for careers in AI development, data science consultancy, and responsible technology leadership. The course aligns with the University's commitment to producing reflective, skilled, and socially responsible professionals.

Professionals in this field often operate across multiple domains:

- As AI-informed analysts and decision-makers, they understand how to apply machine learning, deep learning, and intelligent systems to support strategic planning, predictive modelling, and automated decision-making. They are skilled in interpreting model outputs, assessing algorithmic performance, and communicating insights to stakeholders.
- As managers and project leaders, they oversee AI and data initiatives, balancing technical development with organisational needs. They manage teams, budgets, and timelines, and ensure that AI systems are aligned with business goals and regulatory frameworks.
- As technologists, they work with modern software tools, cloud platforms, and data infrastructures to build scalable and secure AI applications. They bridge the gap between technical development and user experience, ensuring that intelligent systems are usable, interpretable, and maintainable.
- As ethical practitioners, they critically engage with the societal implications of AI and data science, including fairness, accountability, transparency, and data governance. They apply ethical frameworks and legal standards to ensure responsible innovation.

Students may already be working in one of these roles or seeking to enter the field. The course outcomes support development across these domains. Core modules provide a foundation in programming, data management, machine learning, and AI ethics. In contrast, specialised modules allow students to tailor their education to areas such as applied machine learning, data visualisation, and intelligent systems. The independent project will enable students to delve into a topic of personal or professional significance in depth, applying research and technical skills to a real-world challenge.

Teaching is delivered through a blend of lectures, tutorials, lab-based sessions, and collaborative projects. Students benefit from industry-led seminars and guest speakers, who offer insights into current trends and professional practices in Leeds and beyond. Weekly drop-in sessions provide tailored academic support.

Each module typically includes weekly lectures and practical lab sessions, supported by guest speakers and industry-led seminars. Staff offer regular drop-in support to foster personalised learning. The course fosters in-depth learning at the master's level, promoting critical thinking, engagement with academic literature, and the development of original ideas. Students are challenged through applied tasks and authentic assessments that prepare them for employment or further study.

The programme fosters deep learning through critical engagement with academic literature, practical tasks, and reflective activities. Assessments are designed to support the development of key competencies through a balanced mix of coursework, phase tests, presentations, and a final independent project. This capstone project enables students to explore a specialist area in depth, integrating technical, analytical, and research skills to produce an original contribution to the field.

The course-level assessment strategy ensures alignment with learning outcomes and provides a balanced mix of formative and summative methods. Students progressively build their knowledge, technical expertise, and professional confidence, culminating in an applied project that showcases their capabilities in AI and data science.

## Teaching and learning activities

Teaching, curriculum, and assessment methods on this MSc programme are designed to develop students' expertise in both artificial intelligence (AI) and data science, with a strong emphasis on independent critical thinking, contextualised knowledge, and professional readiness. Assessments are structured to simulate real-world

challenges, encouraging students to apply AI and data science techniques to complex, industry-relevant problems. A hands-on, applied approach is embedded across modules, enabling students to select and implement specialist tools such as machine learning frameworks, neural networks, and data engineering pipelines in diverse contexts. Students are supported within an inclusive and adaptive learning environment that recognises and accommodates varied learning needs. Modules draw on diverse international case studies, from global health analytics to multilingual NLP systems allowing students to examine how AI and data science solutions must adapt to cultural, legal, and socio-economic contexts.

All teaching materials follow accessible design principles and make use of assistive technologies supported by the university's digital learning environment. Generative AI tools (e.g., GitHub, Copilot, ChatGPT, and Claude) are introduced critically as part of discussions on transparency, bias, and responsible automation. Moreover, each module includes practical lab-based sessions or tutorials, which are complemented by guest lectures and industry-led seminars focused on emerging trends in AI and data science. Academic staff also offer weekly drop-in sessions for personalised support.

Learning materials and activities are designed to promote deep learning, encouraging students to reflect, synthesise, apply, and critically evaluate concepts across both AI and data science domains. Students will engage with academic literature, research papers, and technical documentation, developing the ability to critique methodologies and philosophies that underpin intelligent systems and data-driven technologies. Students will be challenged to solve interdisciplinary problems, preparing them to apply their skills in research, development, and ethical deployment of AI and data science solutions.

## Course structure

This information is correct for students progressing through the course within standard timescales. If you have to repeat study or take time out during your course, you may be taught alternative modules which meet the overall course learning outcomes.

### Level 7 (Full-time delivery)

#### Compulsory modules

| Module title                                         | Credits | Semester/teaching period |
|------------------------------------------------------|---------|--------------------------|
| Concepts and Technologies of Artificial Intelligence | 15      | S1 / Year 1              |
| Programming Data Science                             | 15      | S1 / Year 1              |
| Data Management and Databases                        | 15      | S1 / Year 1              |
| AI Problem-Solving and Intelligent Systems           | 15      | S1 / Year 1              |
| Applied Machine Learning                             | 15      | S2 / Year 1              |
| Data Visualisation and Communications                | 15      | S2 / Year 1              |
| AI and Data Ethics and Governance                    | 15      | S2 / Year 1              |
| Research Practice for AI and Data Science Projects   | 15      | S2 / Year 1              |
| Project in AI and Data Science                       | 60      | S2 / Year 1              |
| Total number of credits of compulsory modules:       | 180     |                          |

*\*Students are expected to have passed the RPAID module before doing the Project module (60-credits)*

## Level 7 (Part-time delivery)

### Compulsory modules

| Module title                                         | Credits | Semester/teaching period |
|------------------------------------------------------|---------|--------------------------|
| Concepts and Technologies of Artificial Intelligence | 15      | S1 / Year 1              |
| Data Management and Databases                        | 15      | S1 / Year 1              |
| Data Visualisation and Communication                 | 15      | S2 / Year 1              |
| AI and Data Ethics and Governance                    | 15      | S2 / Year 1              |
| Programming Data Science                             | 15      | S1 / Year 2              |
| AI Problem-Solving and Intelligent Systems           | 15      | S1 / Year 2              |
| Applied Machine Learning                             | 15      | S2 / Year 2              |
| Research Practice for AI and Data Science Projects*  | 15      | S2 / Year 2              |
| Project in AI and Data Science                       | 60      | S2 / Year 2              |
| Total number of credits of compulsory modules:       | 180     |                          |

*\*Students are expected to have passed the RPAID module before doing the Project module (60-credits)*

## Assessment and feedback

### Level 7

This course is assessed by a broadly even mix of coursework and examinations. There is a major independent study module which will require the production of 10,000 – 15,000 words for a product-based project.

## Workload

You can expect to spend a total of 100 hours learning per 10 credits.

Typically, a student on this course can expect to divide their time like this:

| Overall workload                  | Level 7    |
|-----------------------------------|------------|
| Teaching, learning and assessment | 169 hours  |
| Independent study                 | 1631 hours |