LEEDS BECKETT UNIVERSITY

Course Specification

MSc Biomechanics of Human Movement

Course Code: MBIHM

2026/27

leedsbeckett.ac.uk

MSc Biomechanics of Human Movement (MBIHM)

Applicant Facing Course Specification for 2026/27 Entrants

Confirmed at 11/2025

General Information

Award	Master of Science Biomechanics of Human Movement
Contained Awards	Postgraduate Diploma Biomechanics of Human Movement Postgraduate Certificate Biomechanics of Human Movement
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: • 12 months (full time, campus based) • 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 from that defined within this information set but the modules offered within each level are consistent. Please note that a 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

https://www.leedsbeckett.ac.uk/our-university/public-information/academic-regulations/

Standard University Regulations apply to this course, with one exception:

Exemption to Academic Regulation 2.3 'Standard Minimum Entry Requirements'; course entry requirements include IELTS 6.5 with no skills below 6.0, or an equivalent qualification.

Professional Accreditation or Recognition Associated with the Course

Professional body

The MSc in Biomechanics of Human Movement is not subject to external reference points such as Professional, Statutory or Regulatory Bodies. However, the course aims and learning outcomes are aligned with several of the key competencies required for those students wanting to gain accreditation (e.g. Chartered Association of Sport and Exercise Sciences). Furthermore, the course content is appropriate for those wanting to prepare for a career in research, applied sport or clinical practice. Lastly, staff teaching on the course are highly engaged in research and professional practice and understand the needs of employers within this area, which assist with course and module developments

Timetable

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 Lauren Duckworth
Your Course Leader	Dr Josh Walker
Your course administrator	SchoolOfSportPGAdmin@leedsbeckett.ac.uk

Course Overview

The philosophy of the course is to focus the student in the study of biomechanics relevant to human movement, which is academically challenging, vocationally relevant and underpinned by evidence-based practice. Furthermore, it aims to meet professional standards set by industry governing organisations such as the British Association of Sport & Exercise Sciences. The breadth of this strongly science based post-graduate degree which specialises in sport and clinical biomechanics is a key aspect of the provision. Students also have the opportunity to apply theory to practice, which creates a highly valuable learning experience with clear vocational and professional significance. Therefore, the content of the MSc in Biomechanics of Human Movement has been carefully designed to provide quality assured professional training to meet the needs of the market and to foster life-long learning in participants.

Aims

This is a postgraduate programme for students who are developing their undergraduate and/or professional experience and who have a desire to study Biomechanics of Human Movement at a higher level. The course is designed to:

- Develop knowledge and understanding of the principles and applications of human movement biomechanics and their application to vocational/professional practice.
- Provide an opportunity to critically assess a broad range of theories, methodologies and research findings in human movement biomechanics.
- Develop a critical understanding of how to apply theories, strategies and methodologies in appropriate ways.
- Enable the student to develop empirical rigour in identifying solutions to complex problems.
- Develop the appreciation of inter-related scientific concepts that promote understanding of problems and issues in the study of human movement biomechanics.
- Provide a forum for the development of research skills and professional competencies in the field of human movement biomechanics.

This programme of postgraduate study will provide students with a training of high academic quality and application to the workplace.

Course learning outcomes

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

1	Understand and utilise the distinctive insights and limitations of the biomechanics discipline relevant to health and sport.
2	Analyse and critically evaluate pertinent research evidence.
3	Take a reflective approach and apply established principles and methodologies to diverse problems and issues relevant to human movement biomechanics.
4	To consider and critically reflect upon both traditional and contemporary approaches to research, theory and practice relevant to human movement biomechanics.

5	Synthesise theoretical debates and complex issues and apply to professional practices and vocational contexts.
6	Deal with complex issues relevant to the area of human movement biomechanics both systematically and creatively, make sound judgment and competently communicating or presenting their conclusions to specialist and non-specialist audiences.
7	Adopt a reflective approach to the understanding of key methodological and pedagogic debates in research relevant to human movement biomechanics.
8	Understand how research methods and techniques generate different kinds of knowledge and be able to apply and use appropriate research skills in the study of human movement biomechanics.
9	Demonstrate independence and originality whilst undertaking a research task in sport and exercise biomechanics.

Teaching and Learning Activities

Summary

The learning and teaching on this programme places the student at the centre of the experience by fostering an inclusive, supportive, caring and challenging environment. The teaching and learning approaches adopted within modules are designed to sensitise students to contemporary issues in Biomechanics and challenge their own assumptions and practices in those contexts. The blend of teaching and learning methods in modules will involve a combination of face-to-face facilitated learning - key lectures on substantive areas, complimented by seminars and practicals (staff and student led), online learning (on and offsite), and self-study through directed reading and independent study tasks. This will differ by module and across the different levels of the postgraduate programme. The main emphasis is face-to-face learning in small seminar groups.

Learning and Teaching Approaches

The learning and teaching on the MSc Biomechanics of Human Movement degree places the student at the centre of the experience by fostering an inclusive, supportive and challenging environment. Through a curriculum which is informed by research and professional practice students will develop the required skills, knowledge and experience. The course will focus on developing sound knowledge of Sport and Clinical Biomechanics with ample opportunities to apply their learning whilst enhancing learning through problem solving approaches. The learning approaches will develop students independent learning capability and critical thinking skills as well as prepare them for employment.

Students will be engaged through a variety of teaching and learning approaches whilst studying the MSc Biomechanics of Human Movement programme. Challenging and authentic tasks will be used to stretch the students' capabilities in real-world learning and assessment, resulting in a deeper approach to learning. Each module on the degree will consist of 20 credits (with the exception of the Major Independent Study, 60 credits) which equates to 200 notional learning hours. The learning on each module will consist of 36 hours contact time within each module.

Learning and teaching approaches will be continually improved using feedback from mid and end of module evaluations, peer review, focus groups, enhancement and development days and module development days. This will ensure that the students' learning experience is continually enhanced by supporting the professional development needs of the academic members of staff who will facilitate the learning experience.

Students will be engaged through a variety of teaching and learning approaches whilst studying the MSc Biomechanics of Human Movement course. Challenging and authentic tasks will be used to stretch the student's capabilities in real world learning and assessment resulting in a deeper approach to learning.

The following learning and teaching strategies will used across the modules;

- Students will attend interactive lectures where they will be expected to contribute having done some preparatory reading in advance
- Students will participate in tutorials where they will work in small groups to engage with learning activities
- Students will engage and contribute to laboratory/ practical sessions.
- Students will organise and conduct laboratory and field data collection, analysis and interpretation.
- Students will work independently to research the relevant literature predominantly using electronic databases and search engines.
- Students will complete directed activities/ formative assessments which will inform the content of scheduled sessions, providing opportunities for feedback.

The blend of learning approaches will involve a combination of face-to-face facilitated learning, online learning and self-study which will differ by module and across levels. Many modules (20-credits) are delivered over a 12-week semester, with students expected to attend on campus each week, at least a 1-hour large group session and at least a 2-hour smaller group seminar/practical session. Recorded lectures and directed activity will be provided around these study hours. Each module will therefore provide 36 hours of taught content, with students expected to dedicate at least 164 hours of independent study across each semester for each module.

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.

Level 7 – Full Time

Compulsory modules

Students must complete at least 3 out of 4 core Biomechanics[1] modules

Disciplines	[1] Biomechanics	[2]Physiology	[3]Psychology	[4]Nutrition

Module title	**Credits**	**Semester/ teaching period**
Research Process	20	Semester 1
Measurement Techniques in Biomechanics[1]	20	Semester 1
Neuromuscular Biomechanics[1]	20	Semester 1
Advanced Biomechanical Analysis of the Sports Performer[1]	20	Semester 2
Biomechanics of Human Gait[1]	20	Semester 2
Professional Practice	20	Semester 1 & 2
Major Independent Study	60	Semester 1,2 & 3
Number of credits of compulsory modules	180	

Option modules

In the event of a student not completing four of the core discipline modules, students will have the option to choose one Option module from the modules listed below*.

Module title	**Credits**	**Semester/ teaching period**
Evidence based practice in Sports Physiology[2]	20	Semester 1
Contemporary Issues in Sport Psychology[3]	20	Semester 1
Sport & Exercise Nutrition[4]	20	Semester 1
Mechanisms of Adaptation to Exercise Training[2]	20	Semester 2
Psychology of Exercise & Health[3]	20	Semester 2
Ergogenic Practices & Nutritional Manipulation in Sport & Exercise Nutrition[4]	20	Semester 2
Sports Injury Management & Rehabilitation	20	Semester 2
Number of credits of option modules a student should choose	20*	

Level 7 – Part Time

Compulsory modules

Students must complete at least 3 out of 4 core Biomechanics[1] modules

Disciplines	[1] Biomechanics	[2]Physiology	[3]Psychology	[4]Nutrition

Module title	**Credits**	**Semester/ teaching period**
Measurement Techniques in Biomechanics[1]	20	Semester 1 – Year 1
Neuromuscular Biomechanics[1]	20	Semester 1 – Year 1
Advanced Biomechanical Analysis of the Sports Performer[1]	20	Semester 2– Year 1
Biomechanics of Human Gait[1]	20	Semester 2– Year 1
Research Process	20	Semester 1 – Year 2
Professional Practice	20	Semester 1 & 2 – Year 2
Major Independent Study	60	Semester 1,2 & 3 – Year 2
Number of credits of compulsory modules	180	

Option modules

In the event of a student not completing four of the core discipline modules, students will have the option to choose one Option module from the modules listed below*.

Module title	**Credits**	**Semester/ teaching period**
Evidence based practice in Sports Physiology[2]	20	Semester 1– Year 1
Contemporary Issues in Sport Psychology[3]	20	Semester 1– Year 1
Sport & Exercise Nutrition[4]	20	Semester 1– Year 1
Mechanisms of Adaptation to Exercise Training[2]	20	Semester 2– Year 1
Psychology of Exercise & Health[3]	20	Semester 2– Year 1
Ergogenic Practices & Nutritional Manipulation in Sport & Exercise Nutrition[4]	20	Semester 2– Year 1
Sports Injury Management & Rehabilitation	20	Semester 2– Year 1
Number of credits of option modules a student should choose	20*	

The full-time and part-time study pattern outlined above reflects a recommended course study structure. However, it is recognised that for some students undertaking part-time study more flexibility will be needed in terms of number of modules completed each year as well as the order of modules studied.

Part-time students will be supported by the course team to determine an appropriate selection of modules from the level for each year of study. The table above provides a suggested module distribution for those students studying part-time over 24 months.

Assessment 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

Level 7

This course is assessed by a broadly even mix of coursework and practical assessments, with some examinations. There is a major independent study module which is assessed by a 6,000-word dissertation.

Workload

Overall Workload	**Level 7**
Teaching, learning and assessment	242 hours
Independent study	1558 hours