

## MSc Sport Biomechanics

### Frequently Asked Questions

#### 1. What are the minimum entry requirements?

There are four minimum entry requirements: 1) an (attained or predicted) upper second class honours degree (or equivalent) in sport and exercise science or natural sciences/mathematics/engineering ideally with a biomechanics component, 2) high standard grades in relevant undergraduate and/or postgraduate modules, 3) a personal statement, and 4) two sound academic references. Note that these are the minimum requirements for consideration and entry onto the programme; evidence of them does not guarantee an offer or registration onto the programme. See question 2.

#### 2. What are the realistic entry requirements and what can I do to enhance my chances of acceptance?

Entry onto this programme is competitive. To enhance chances of acceptance, applicants should demonstrate evidence of some of the following:

- Upper second-class undergraduate or postgraduate degree(s) in a relevant subject
- Upper second-class grades in relevant modules
- Strong references
- A research project in biomechanics or sports science
- Professional qualifications in biomechanics or sport-related areas
- Experience in sports coaching, management, administration or officiating
- Experience as a high-level sports performer
- Work experience in biomechanics or sports science
- A well-structured and written personal statement, highlighting some of the above
- Presentation of research project findings at a biomechanics or sports science conference or workshop
- Publication of research in an international peer-reviewed journal
- Membership of one or more of the following professional bodies and involvement in their student activities
  - [International Society of Biomechanics \(ISB\)](#)
  - [International Society of Biomechanics in Sports \(ISBS\)](#)
  - [European Society of Biomechanics \(ESB\)](#)
  - [American Society of Biomechanics \(ASB\)](#)
  - [British Association for Sport and Exercise Sciences \(BASES\)](#)
- Attendance at one or more of the following sports science or biomechanics conferences or workshops
  - ISB Congress
  - World Congress in Biomechanics
  - ESB Congress
  - ASB Annual Conference
  - ISBS Annual Conference
  - BASES Biomechanics Interest Group (BIG) Annual Conference

### **3. In terms of being accepted onto the programme, is it preferable to have a sports science or natural sciences/mathematics/engineering background?**

There is no preference, although students who can demonstrate a background in both (e.g. a joint honours undergraduate degree in sports science and mathematics) are viewed favourably. However, each application is evaluated on individual merit and a variety of factors are taken into consideration (see questions 1 and 2).

### **4. How do I find out about tuition fees and financial support for the programmes?**

See the information about [taught postgraduate finance](#).

### **5. Can I study part-time for the programme?**

Yes, lasting between two and six years. This is a sample schedule for two-year part-time study:

#### **Year one**

Semester 1

[Neuromuscular Function](#), and [Critical Analysis of Biomechanics Research](#).

Semester 2

[Motion Analysis of Human Movement](#), and [Critical Analysis of Biomechanics Research](#)

#### **Year two:**

Semester 1

[Orthopaedic Sport Biomechanics](#), and [Theoretical Sport Biomechanics](#).

Semester 2

[Developing Computer Models for Sport Biomechanics](#), and [Quantitative Research](#), and [Project](#).

(Note that [Critical Analysis of Biomechanics Research](#) is taught in both the first and second semesters, and that part-time students are required to complete their [Project](#) in their final year).

Please see the sample timetable (Appendix A) for specific contact hours and times. The notional learning time is 10 hours per credit, including contact time; so, 150 hours per 15 credit module, and 1800 hours over the 180 credit programme.

### **6. Is there a distance learning option for the programmes?**

No.

**7. Does Loughborough University or the School of Sport, Exercise and Health Sciences have an open day?**

Yes, a [Postgraduate Open Day](#) is held annually at which you can meet the Programme Leader, teaching staff, current students, attend a [campus tour](#), and ask further questions about the programmes.

**8. Is there anything international students should be aware of?**

Yes, see the information for [International Students](#).

**9. Can I meet the Programme Leader?**

Yes – see question 8.

**10. Can I tour the campus?**

Yes – see question 8.

**11. How do I ask further questions I have about the programmes?**

Attend the [Postgraduate Open Day](#) – see question 8.

**12. How do I apply for a place on the programme?**

See the information about [the application process](#). Applicants must ensure that they fully complete the application form and attach the following supporting documentation: an academic transcript of their module marks and yearly average marks; a university certificate of any undergraduate and/or postgraduate qualifications; a personal statement, of no more than a page; and two academic references. Applications are accepted from the start of October and close at the end of August. Applicants are judged against the criteria outlined in questions 1 and 2. Tip: in their personal statement, applicants should put in **bold** font any criteria outlined in questions 1 and 2 that they meet or have experience of.

**13. I have applied for a place on the programme, when will I be notified of the decision?**

Applicants are notified of the decision within 4-6 weeks of their application, and often sooner.

**14. I have been accepted onto the programme and would like to defer my place to the following academic year. Am I able to?**

Yes, but please be aware that if tuition fees increase between your application and the start of your studies then you will be liable for the increased fees.

**15. I have been accepted onto the programme and would like to begin preparation. What can I do?**

The most useful book for the course as a whole is [Research Methods in Biomechanics](#), familiarising yourself with the contents would be highly beneficial, also apprising yourself of the work of the [Sports Biomechanics and Motor Control Research Group](#) would be very helpful. The [Loughborough University library](#) provides links to many relevant books and journals. See also question 16.

**16. I am a current student on the programmes. What can I do to enhance my career prospects?**

To enhance their career prospects, students on the programme should strive to demonstrate evidence of one or more of the following:

- A distinction in their MSc degree – attain distinction grades in the modules
- Distinction grades in the modules – contact the Module Leader and library for advice
- Networking in the sport and exercise biomechanics community – actively participate in sport and exercise biomechanics-related activities in the School, join professional bodies and participate in their student activities, and attend conferences and workshops
- Membership of one or more of the following professional bodies and involvement in their student activities
  - [International Society of Biomechanics \(ISB\)](#)
  - [International Society of Biomechanics in Sports \(ISBS\)](#)
  - [European Society of Biomechanics \(ESB\)](#)
  - [American Society of Biomechanics \(ASB\)](#)
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  - ESB Congress
  - ASB Annual Conference
  - ISBS Annual Conference
  - BASES Biomechanics Interest Group (BIG) Annual Conference
  - BASES Annual Conference
  - BASES Annual Student Conference
- Presentation of research project findings at a biomechanics or sports science conference or workshop – consult your Project Supervisor
- Publication of research project findings in an international peer-reviewed journal – consult your Project Supervisor
- Professional qualifications in biomechanics or sport-related areas – consult the Sports Development Centre and professional bodies
- Experience in sports coaching, management, administration or officiating – consult the Sports Development Centre and local sports clubs
- Experience as a high-level sports performer – consult the Sports Development Centre and local sports clubs
- Work experience in biomechanics or sports science – consult the Programme Leader and professional bodies

- A well-structured and written curriculum vitae, which highlights one or more of the above, depending on the career pathway you wish to follow – consult the library

## 18. What are the career prospects on completion of the programmes?

Sport and exercise biomechanics is a competitive area and an MSc postgraduate degree is not always enough to get a job; it is merely a prerequisite and often further qualification in the form of a PhD is required. The [Biomch-L website](#) is the best source of information on career and further study opportunities in biomechanics internationally. Literature and links to career opportunities in applied sport biomechanics is also provided on the [BASES website](#).

Although graduates go on to work in many fields, the programme is aimed at preparing them for two main careers.

1. Lecturer/professor of sport and exercise biomechanics/sport and exercise science (specialising in biomechanics). Students should apply for doctoral degrees (PhDs) in topic areas they are interested in, which typically involves three years' full-time study (up to five years' part-time study). In the United Kingdom, funded doctoral degrees are regularly advertised on [www.jobs.ac.uk](http://www.jobs.ac.uk), the [BASES website](#), the [Biomch-L website](#), and university web pages. It is also possible to [self-fund a doctoral degree](#). Students are encouraged to identify topics/areas they are interested in and contact potential supervisors to enquire about opportunities.
2. Sport and Exercise Biomechanist/Sport and Exercise Scientist (specialising in biomechanics). Students aiming to go down this route could contact [BASES](#) about registering on their [Supervised Experience \(SE\)](#) pathway, which typically involves two years full-time (up to six years part-time) training as a 'Probationary Sport and Exercise Scientist'. Note that BASES require that trainees intending to register on their SE pathway have an undergraduate degree or postgraduate qualification in sport and exercise science. On successful completion of the BASES SE pathway, individuals can [apply to BASES for accreditation](#) as a 'Sport and Exercise Scientist'. Students are encouraged to contact [potential supervisors](#) to enquire about opportunities and supervisory fees.

Many job opportunities in sport biomechanics are currently in academia due to the expense of biomechanics equipment, and the time-consuming nature of biomechanical analysis. However this is changing as equipment and analysis become cheaper and more automated.

Other opportunities for work in biomechanics do exist in clinical gait analysis labs which are often part of the NHS or private health clinics, and with R&D departments of companies developing sporting equipment, prostheses, biomechanical measurement systems etc.

Follow this link to read about one of our recent graduate's experiences:  
<https://www.lboro.ac.uk/alumni/our-alumni/finn-taylor/>



Appendix A – Sample timetable

<b>Monday</b>	09:00-10:00	PSP405 Developing Computer Models... Dr Sam Allen	PSP401 Motion Analysis of Human Movement Dr Matthew Pain						
		L027 (Wavy Top) Lecture Weeks: Sem 2: 1 - 7	YY001 (John Cooper) Lecture Weeks: Sem 2: 1 - 2						
<b>Tuesday</b>	09:00-10:00	PSP002 Quantitative Research Dr Keith Tolfrey, Harry Mistry U007 (Brockington)							
		Computer Lab Weeks: Sem 2: 1 - 5, 7 - 8, 9 - 11							
<b>Wednesday</b>	09:00-10:00								
	10:00-11:00	PSP405 Developing Computer Models for Sports Biomechanics Dr Sam Allen							
<b>Thursday</b>	09:00-10:00								
	10:00-11:00	HE021, HE021a (Clyde Williams)							
<b>Friday</b>	09:00-10:00								
	10:00-11:00								
	11:00-12:00	PSP403 Current Research in Sports Biomechanics Dr Daniel Fong, Dr Laura-Anne Furlong, Dr Mark K...							
	12:00-13:00	L027 (Wavy Top) Seminar Weeks: Sem 2: 1 - 7							
	13:00-14:00								
	14:00-15:00	PSP401 Motion Analysis of Human Movement Dr Matthew Pain							
	15:00-16:00	HE021, HE021a (Clyde Williams)							