Nottingham Trent University Course Specification

	Basic Course Information	
1.	Awarding Institution:	Nottingham Trent University
2.	School/Campus:	SST/ Clifton
3.	Final Award, Course Title and Modes of Study:	MRes Biomechanics Full time and part time
4.	Normal Duration:	1 year full time or 2 years part time
5.	UCAS Code:	N/A

6. Overview and general educational aims of the course

The Quality Assurance Agency defines "sport" to mean *all forms of physical activity, which, through casual or organised participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels*. Our MRes Biomechanics degree encapsulates this philosophy and considers the scientific aspects of sport and exercise. Our MRes is intended to provide you with a focussed insight to a particular area of sport and exercise science. The aim is that you graduate from this course as an expert in biomechanics.

We offer outstanding facilities such as the Sports Science Environmental Chamber, which is British Olympic Association Approved, and 3-dimensional imaging equipment used to digitally capture human motion for technique analysis.

By embracing benchmarks set by agencies associated to the sector, the aims of the MRes Biomechanics are:

a) To provide an intellectually challenging and professional relevant education at Master's degree-level.
b) To deliver a course underpinned by leading edge academic and professional expertise.
c) To produce graduates with theoretical knowledge and practical skills relevant to sport and exercise biomechanics.
d) To enhance the participants' capacities to manage their own development, time and apply your own prior knowledge and experience within the course.
e) To enable participants to research an area of study in biomechanics through an academically rigorous project.
f) To produce postgraduates who meet the expectations of employers.

7. Course outcomes

Course outcomes describe what you should know and be able to do by the end of your course if

you take advantage of the opportunities for learning that we provide.

Knowledge and understanding

By the end of the course you should be able to:

K1) Demonstrate a systematic understanding of knowledge and critical awareness of the issues at the forefront of biomechanics;

K2) Conduct research that is unique and forward-thinking in a particular area of biomechanics;

K3) Continue to advance your prior knowledge and understanding of fundamental scientific concepts of sport and exercise science, and develop new skills to a high level[QAA];

Skills, qualities and attributes

By the end of the course you should be able to:

S1) Critically evaluate and implement physiological, psychological and/or biomechanical principles for the assessment of human performance;

S2) Critically evaluate a particular aspect of physiology or biomechanics[QAA];

S3) Act autonomously in planning and directing your personal academic and professional development[QAA];

S4) Demonstrate expertise in highly specialised and advanced research, technical, communication and professional skills;

S5) Undertake and evaluate complex issues in a systematic and creative way for the purpose of hypothesis testing;

S6) Communicate ideas and concepts clearly and articulately, exhibit a range of interpersonal skills and competencies, including the ability to work constructively and co-operatively, which will commend you to employers.

[QAA] Indicates outcomes having specific reference to Quality Assurance Agency benchmark statements.

8. Teaching and Learning Methods

The MRes Biomechanics offers you a combination of research and area specific expertise (see Table 1.) You will spend time with your research project supervisor as well as a variety of leading sport science staff. You will experience a mixture of seminars, lectures, laboratories and you will also have several opportunities to present in front of peers and academic staff.

Table 1. A summary of the teaching and learning strategies for modules within the courses.

MRes in Biomechanics

MODULE	CP	Level	CT	DLT/ILT	Total
Sport Science Research Methods (SPOR40061)	15	M	36	114	150
Sport Science in Action (SPOR40041)	15	M	36	114	150
Biomechanics of Optimal Performance (SPOR40291)	30	M	60	240	300
Sport Research Project (SPOR40001)	120	M	36	1164	1200

KEY:

CT = contact time is lectures, tutorials, seminars and laboratory and field-work time.
DLT = directed learning time.
ILT = independent learning time.

The research project is the culmination of the course. The MRes emphasises and encourages independent learning and is structured as to improve your ability to undertake high quality research and critical analysis. Supplementary reading, research and information gathering is expected to consolidate taught material.

9. **Assessment Methods**

The course utilises a variety of assessment methods to ensure that you can demonstrate your achievement of the course's learning outcomes. Subject knowledge and understanding is mainly tested through preparation of case studies, write-up of practical and laboratory work, oral and poster presentations.

Laboratory experiments and investigations are used to assess a range of practical skills. Your ability to formulate research questions, assess human performance, collate, present, interpret and evaluate findings of an

investigation are assessed through the preparation of the laboratory reports.

Students are assessed in a manner consistent with the aims, objectives and learning outcomes of the module. Assessed work will take one or more of the following forms:

- Research Project

  This module tests your ability to design and implement a research course, and communicate the findings to an informed audience in a comprehensive thesis, written in an appropriate scientific style.

- Written assignment

  This tests your writing skills. You are expected to consider the scientific problems of the assignment topic and the way in which they have been resolved; this must be fully referenced from the current literature. This method of assessment has been included because it tests your ability to communicate scientific findings in a clear and logical way.

- Oral presentation

  This assesses your oral communication skills. You will be assessed on your ability to communicate cogently using appropriate visual aids. You will also be assessed on your ability to answer questions with knowledge and authority. An oral presentation is included because it tests the ability to communicate orally, a vital skill for any professional.

- Formal report

  This is a written report in the style of a scientific paper, which includes an abstract, introduction, methods, results, discussion, and references. This provides you with experience of writing scientific research for journals and wider publication.

- Poster presentation

  This is a written poster display of the findings of the research project. It was chosen as a form of assessment because it tests your ability to synthesise arguments and present them in a highly condensed, accessible and pictorial form. Posters are used at scientific conferences, and students who wish to progress their research career, need to be able to produce them.

- Job application and interview (Sport Science in Action)

  This is the completion of an application letter and CV for a real life job. You will then be shortlisted and interviewed for the position. It provides you with a 'real situation' in a controlled environment where you will receive both training and feedback about interviews and your interview

technique.

10. Course structure and curriculum

A summary of the MRes course is given in Table 2. All the modules are compulsory. The course can be taken on a full time or part time basis.

Table 2. MRes in Biomechanics

Module	Credit points	Content
1. Sport Science Research Methods (SPOR40061)	15cp	This module aims to: utilise modern technology to assess and survey the literature; develop the ability to make a critical appraisal of the available information; and develop the skills required to formulate and design research courses.
2. Sport in Action (SPOR40041)	15cp	This module will provide postgraduate students with relevant information to develop employability and practical skills in their chosen field. The module will include a variety of teaching methods and sessions that are aimed at assisting sport scientists with both field and laboratory work and research. A key aspect of the module will be to provide students with appropriate capabilities to further their own research by writing manuscripts, developing conference materials, working towards relevant accreditation(s) and securing grants for research sustainability.
3. Biomechanics of Optimal Performance (SPOR40291)	30cp	This module will enable you to develop a systematic understanding of the measurement and analytical tools required to undertake sport biomechanics research and support work.
4. Research Project	120cp	The research project is an opportunity to investigate a current topic in a specific area of biomechanics and kinesiology.

11. Admission to the course

The specific requirements normally required for entry on to the MRes in Biomechanics will include:

- A minimum of 2:1 or equivalent honours degree.

In the absence of the above requirement, applicants will be considered according to the following criteria:

- A background in sport science based subjects.
- Mature students with non-traditional qualifications with proven relevant experience and necessary motivation will be considered.
- Such other qualification(s) and experience as the Admissions Panel deem to be equivalent in subject content and level of attainment.
- An individual who can operate independently and is self-motivated and committed.
- Effective oral and written communication skills.

A good command of spoken and written English is an essential requirement for the course. If you are overseas applicants from a non-English speaking country, the minimum recommended requirement is the British Council IELTS grade 6.5 or its equivalent. Equivalent experience may include the successful completion of a non-UK degree in the English language or a significant period of residence/work placement in an English speaking country, for which evidence should be provided.

The overriding consideration will be the extent to which the applicant will succeed on a course and benefit from it.

Students will be allowed to transfer between MRes courses if their optional module and project title are appropriate for them to do so. Transfers should be completed by March of the year of graduation.

12. Support for Learning

All students at Nottingham Trent University have full access to Student Support Services. In addition, School based pastoral support networks are in place to offer students support, guidance and advice on academic and personal issues. Where necessary, the Academic Team will liaise with University Student Support Services. Within the course, students will experience the full support

of the Sport Science Academic Team.

Your progress will be formally monitored at 2 Examination Boards per year. You will also be regularly advised by your Project Supervisor.

Supervisors will be continually guiding your progress throughout your degree course. For example you will participate in research team meetings (potentially across disciplines), individual meetings with research project supervisors and other contact or communication as appropriate.

University Accommodation Officers will provide you with information, guidance and continuing support about accommodation issues, for example hall of residence, private rented accommodation, and the Landlord Approval Scheme. The Accommodation Services can be accessed through www.ntu.ac.uk.

We want you to feel part of a learning community and every effort will be made to uphold this aim to the highest standards.

13. Graduate destinations / employability

There are a wide range of career opportunities in the sport and leisure industry, health and fitness industry, or PhD studies, which your MRes will enable you to embark upon at the completion of this course. The sport, exercise, health and leisure industry is an expanding area of employment. Opportunities exist with local, regional and national authorities to develop services and facilities for sport and exercise provision; private health and fitness sector; health consultancy; professional sports clubs; sports development agencies; and coaching, to name a few.

The University's Career Service has an enviable reputation for finding our graduates employment and offers individual consultations.

14. Course standards and quality

The Course Committee, with staff and student representatives, operates to discuss matters arising in the course, review module feedback and consider the course report and external examiners comments. Overarching responsibility for quality control lies with the School Academic Standards and Quality

Committee whose remit is to provide guidance and support to academic courses. External Examiners offer further quality control through monitoring academic standards, moderation of assessment tasks and processes.

Other methods for ensuring course management and quality assurance lies with the following

- Academic Team Leader (ATL) for Sport
- Postgraduate Course Manager
- Course Leader(s) for MRes Biomechanics
- Research project supervisors
- Module Leaders
- Appointed student representatives

An important measure of quality is the feedback you receive on your work. The Course team will ensure that you receive comprehensive feedback on all your assignments.

15. **Assessment regulations**

This course is subject to the University's Common Assessment Regulations (located in its Academic Standards and Quality Handbook). Any course specific assessment features are described below:

16. **Additional Information**

Collaborative partner(s):

Course referenced to national QAA Benchmark Statements: Hospitality, Leisure, Sport and Tourism

Course recognised by:

Date implemented: Jan 2014

Any additional information: