Part III

The students will work on projects which contribute to cutting-edge scientific, clinical and industrial research. For example, research on HA collars in Massive Implants for bone tumour patients, non-invasive grower prosthesis for children and ITAP-Deer Antler Model (Intraosseous Transcutaneous Amputation Prostheses) have all developed into orthopaedic implants used in clinical application.

The projects cover a wide range of interdisciplinary research in an internationally-leading laboratory; some of them are in collaboration with other institutions and organisations. Our students have often presented their work at national and international conferences and published papers in peer-reviewed scientific journals. Some of the projects have won national awards.

Assessment

Modules 1-4: Each assessed by a two-hour unseen written examination.

Modules 5-8 & 10: Assessed by coursework only.

Module 9: Assessed by one unseen written examination.

Dissertation: Assessed by Viva.

Entry Requirements

Minimum Second class Honours degree or equivalent is required. For overseas students, a minimum IELTS score of 6.5 is needed.

For further information please contact:
Dr. Jia Hua
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Stanmore,
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Application Forms

Applications may be made online or forms may be downloaded, completed and returned. See www.ucl.ac.uk/prospective-students/graduate-study/application-admission for details.

If you are unable to obtain an application form through the website then please contact Dr Jia Hua.

Closing date for applications: 1 September.
Flexibility in Learning

**Study full-time,** complete in one calendar year (September-August; Or
**Study part-time,** complete in two years; Or
**Study flexible/module based,** complete in between three to five years. Or

**Online based distance learning.** All lectures will be provided on-line. A local supervisor/mentor is required. For more details see www.UCL.ac.uk/Silva/Surgicalscience/Courses/MSc_Musculoskeletal_distance

Possibility to Study in Parts

Successful completion of three parts – **MSc degree** will be awarded.
Successful completion of first and second parts – **Diploma** will be awarded.
Successful completion of first part – **Certificate** will be awarded.

Programme Aims

This programme covers a broad spectrum of musculoskeletal topics, including basic science and clinical aspects

It aims to give students, in a multidisciplinary setting, a holistic view of musculoskeletal science and medicine. Additionally, it is intended to provide an in-depth knowledge of specific areas, appropriate to each individual, that will equip them to make a strong contribution to the development of musculoskeletal services.

Programme Venues

**UCL Institute of Orthopaedics & Musculoskeletal Science, Royal National Orthopaedic Hospital, Stanmore**

Programme Convenor

Professor David Marsh

Programme Director and Tutor

Dr Jia Hua

Mechanical Testing Rig investigating wear characteristics of materials for arthroplasty

**Biology of healing bone at a fracture site**

Suitable For:

- Medical trainees, with an interest in orthopaedics, rheumatology, geriatrics and sports medicine
- GPs
- Osteopaths and complementary medicine professionals
- Nurses, physiotherapists and other allied health professionals
- Biologists and engineers Industry
- Trainees for the pharmaceutical or medical device companies
- Health service managers.

Curriculum

There are three elements to the curriculum:

- **Core modules**
- **Optional modules**
- **Research project.**

Part I

Four core modules:

**Module 1:** Clinical Aspects of Musculoskeletal Medicine and Surgery, Part I

**Module 2:** Musculoskeletal Biology, Part I

**Module 3:** Musculoskeletal Biomechanics and Biomaterials, Part I

**Module 4:** Musculoskeletal Epidemiology and Research Methodology, Part I.

Part II

Select four from the following optional modules:

**Module 5:** Clinical Aspects of Musculoskeletal Medicine and Surgery, Part II

**Module 6:** Musculoskeletal Biology, Part II

**Module 7:** Musculoskeletal Biomechanics and Biomaterials, Part II

**Module 8:** Musculoskeletal Epidemiology and Research Methodology, Part II

**Module 9:** Medical Imaging (Ionising and Non-Ionising) – a module of MSc in Medical Image Computing, provided by the Centre for Medical Image and Computation (Not for Distance Learning.)

**Module 10:** Clinical Experience in Musculoskeletal Surgery. (This module takes place at Watford General Hospital and is not available for Distance Learning).