FACULTY OF ENGINEERING

DEPARTMENT OF BIOMEDICAL ENGINEERING

BIOMEDICAL ENGINEERING

Master of Research in Biomedical Engineering
Master of Research in Biomedical Engineering with Biomechanics
Master of Research in Biomedical Engineering with Cell and Tissue Engineering
Postgraduate Certificate in Biomedical Engineering

For regulations relating to admissions, duration of study, examinations, progress, final assessment, award and research elements of this degree, please refer to the General Academic Regulations - Postgraduate Research Degree Regulations.

For regulations relating to taught (compulsory/optional) modules, please refer to the General Academic Regulations - Postgraduate Taught Degree Programme Level.

Admission

1. Applicants shall possess:

    i. a degree (or, in the case of direct entry to the degree of MRes, a first or second class Honours degree) from a United Kingdom University (in an appropriate discipline); or
    ii. a qualification deemed by the Programme Director acting on behalf of Senate to be equivalent to (i) above.

2. In all cases, applicants whose first language is not English, shall be required to demonstrate an appropriate level of English.

Duration of Study

3. See General Academic Regulations - Postgraduate Research Degree Regulations.

Mode of Study

4. The programme is available by full-time and part-time study.

Credit Transfer and Recognition of Prior Learning

5. At the discretion of the Head of Department or Programme Leader, credit transfer and RPL may be granted for up to 34% of the programme.

Curriculum

6. All students shall undertake an approved curriculum as follows:

Compulsory Modules

Module Code	Module Title	Level	Credits
BE918	Professional Studies in Biomedical Engineering	5	10
BE919	Research Methodology	5	10
BE913	MRes Project	5	120

Either*			
BE911	Engineering Science	5	20
Or			
BE915	Medical Science for Engineering	5	20

*Dependent on the academic background of the student and chosen after consultation with the Programme Leader.

MRes in Biomedical Engineering

No fewer than 20 credits chosen from the list of optional modules.

MRes in Biomedical Engineering with Biomechanics

Module Code	Module Title	Level	Credits
BE916	Introduction to Biomechanics	5	10

Plus, no fewer than 10 credits chosen from the list of optional modules.

MRes in Biomedical Engineering with Cell and Tissue Engineering

Module Code	Module Title	Level	Credits
BE901	Regenerative Medicine and Tissue Engineering	5	10

Plus, no fewer than 10 credits chosen from the list of optional modules.

Optional Modules

Module Code	Module Title	Level	Credits
BE916	Introduction to Biomechanics	5	10
BE902	Prosthetics and Orthotics	5	10
BE901	Regenerative Medicine & Tissue Engineering	5	10
BE900	Tissue Mechanics	5	10
BE909	Biomedical Electronics	5	10
BE904	Clinical and Sports Biomechanics	5	10
BE905	Bio-signal Processing and Analysis	5	10

BE906	Biomaterials and biocompatibility	5	10
BE903	Cardiovascular Devices	5	10
BE908	Biomedical Instrumentation	5	10
BE912	Anatomy & Physiology	5	10
BE920	The Medical Device Regulatory Process	5	10
BE923	Haemodynamics for Engineers	5	10
BE924	Medical Robotics	5	10
BE925	Numerical Modelling in Biomedical Engineering	5	10
BE928	Rehabilitation Technology	5	10

Examination, Progress and Final Assessment

7. See General Academic Regulations - Postgraduate Research Degree Regulations.

Award

8. **Degree of MRes:** In order to qualify for the award of the degree of MRes, a candidate must have performed to the satisfaction of the Board of Examiners and must have accumulated no fewer than 180 credits, of which 120 must have been awarded in respect of the project BE913.

9. **Postgraduate Certificate:** In order to qualify for the award of the Postgraduate Certificate in Biomedical Engineering, a candidate must have accumulated no fewer than 60 credits from the taught modules of the programme curriculum.