

FACULTY OF ENGINEERING

DEPARTMENT OF BIOMEDICAL ENGINEERING

MEDICAL DEVICES

Master of Science in Medical Devices
Postgraduate Diploma in Medical Devices
Postgraduate Certificate in Medical Devices

These regulations are to be read in conjunction with [General Academic Regulations - Postgraduate Taught Degree Programme Level](#).

Admission

1. See [General Academic Regulations - Postgraduate Taught Degree Programme Level](#).

Duration of Study

2. See [General Academic Regulations - Postgraduate Taught Degree Programme Level](#).

Mode of Study

3. The programmes are available by full-time and part time study.

Curriculum

4. All students shall undertake an approved curriculum as follows:
 - i. for the Postgraduate Certificate no fewer than 60 credits
 - ii. for the Postgraduate Diploma no fewer than 120 credits of which no fewer than 20 shall be derived from a dissertation
 - iii. for the degree of MSc no fewer than 180 credits including a project
5. As permitted by the [General Academic Regulations - Postgraduate Taught Degree Programme Level](#) and at the discretion of the Programme Leader, exemption from part of the programme may be granted to students submitting evidence of appropriate academic attainment or accredited prior experiential learning.

Compulsory Modules

Module Code	Module Title	Level	Credits
BE915	Medical Science for Engineering	5	20
MP931	Generic Biomedical and Pharmaceutical Research Skills	5	20
BE918	Professional Studies in Biomedical Engineering	5	10
BE919	Research Methodology	5	10
BE909	Biomedical Electronics	5	10
MP959	Advanced Techniques in Biomedical Research	5	10

BE920	The Medical Device Regulatory Process	5	10
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Students for the degree of MSc only:

Module Code	Module Title	Level	Credits
BE910	EngD/MSc Medical Devices Project	5	20
BE908	Biomedical Instrumentation	5	10

No fewer than 60 credits from the list of optional modules.

Students for the Postgraduate Diploma only:

Module Code	Module Title	Level	Credits
BE914	PGDip Medical Devices Dissertation	5	20

No fewer than 10 credits from the list of optional modules.

Optional Modules

Module Code	Module Title	Level	Credits
BM918	Clinical Biochemistry	5	10
BE916	Introduction to Biomechanics	5	10
BE904	Clinical and Sports Biomechanics	5	10
BE900	Tissue Mechanics	5	10
BE906	Biomaterials and Biocompatibility	5	10
BE901	Regenerative Medicine & Tissue Engineering	5	10
BE903	Cardiovascular Devices	5	10
BE902	Prosthetics and Orthotics	5	10
BE905	Bio-signal Processing and Analysis	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
MP941	Advanced Techniques in Biochemistry	5	10
MP946	Advanced Techniques in Molecular Biology	5	10

Examination, Progress and Final Assessment

6. See [General Academic Regulations - Postgraduate Taught Degree Programme Level.](#)
7. The final award will be based on performance in the examinations, coursework, and the Project where undertaken.

Award

8. **Degree of MSc:** In order to qualify for the award of the degree of MSc in Medical Devices, a candidate must have performed to the satisfaction of the Board of Examiners and must have accumulated no fewer than 180 credits, of which 20 must have been awarded in respect of the Project BE910.
9. **Postgraduate Diploma:** In order to qualify for the award of Postgraduate Diploma in Medical Devices, a candidate must have accumulated no fewer than 120 credits of which 20 must have been awarded in respect of the Dissertation.
10. **Postgraduate Certificate:** In order to qualify for the award of the Postgraduate Certificate in Medical Devices, a candidate must have accumulated no fewer than 60 credits from the taught modules of the programme.