Programme Regulations: 2021/22

Programme Title: Degree of Master of Science in Biomedical Engineering - Code: 5204F

Notes:
(i) *These programme regulations should be read in conjunction with the University's Taught Programme Regulations.*
(ii) *A core module is a module which a student must pass.*
(iii) *A compulsory module is a module which a student is required to study.*
(iv) *All modules are delivered in Linear mode unless stated otherwise as Block, eLearning or distance learning.*
(v) *If a candidate is a graduate of Newcastle University the candidate is not permitted to take a module which has already been taken as part of another programme. In such a case the Degree Programme Director shall substitute appropriate modules.*

1.   Programme structure

(a)   The programme is available for study in full-time mode only.

(b)   The period of study for full-time mode shall be one year starting in September.

(c)   The programme comprises modules to a credit value of 180.

(d)   All candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Credits Sem 3*	*Level*	*Type*
MEC8054	Contemporary Case Study in Biomedical Engineering	20	20			7	Block
MEC8049	Orthopaedic Engineering	20		20		7	Block

(e)   Candidates who have studied Introduction to Biomedical Engineering (MEC3022/MEC3031) as part of a previous programme of study at Newcastle University shall replace MEC8054 with the following compulsory module:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Credits Sem 3*	*Level*	*Type*
MEC8029	Design of Mechanical Power Transmissions	20	20			7	Block

(f)   Candidates shall select one of the streams listed in (i)-(iv) below:

(i)   Biomechanical Engineering Stream

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Credits Sem 3	Level	Type
MEC8060	Introduction to Tissue Engineering	20		20		7	Block
MEC8080	Core Skills	20	20			~~7~~	Block
MEC8056	Medical Devices Regulatory Requirements	20		20		7	Block
MEC8059	Biomaterials	20	20				Block
MEC8095	MSc Project: Mechanical and Systems Engineering	60		10	50	7	Core

(ii)   Regulatory Sciences Stream

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Credits Sem 3	Level	Type
HSC8008	Global Health Policy & Medicines Use	20		20		7	Linear
HSC8057	Global Health	20	20			7	Linear
MEC8059	Biomaterials	20	20			7	Block
MEC8056	Medical Devices Regulatory Requirements	20		20		7	Block
MEC8095	MSc Project: Mechanical and Systems Engineering	60		10	50	7	Core

(iii)   Bioelectrical Engineering Stream

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Credits Sem 3	Level	Type
EEE8098	Image Processing and Computer Vision	20		20		7	Block
EEE8097	Individual Project	60		10	50	7	
EEE8116	Bioelectronics	20		20		7	Block
EEE8129	Intelligent Signal Processing	20		20		7	Block
MEC8080	Core Skills	20	20			7	Block

(iv)   Biomaterials Stream

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Credits Sem 3	Level	Type
MEC8056	Medical Devices Regulatory Requirements	20		20		7	Block
MEC8095	MSc Project: Mechanical and Systems Engineering	60		10	50	7	
MEC8060	Introduction to Tissue Engineering	20		20		7	Block
MEC8059	Biomaterials	20	20			7	Block
MEC8051	Biomedical Additive Manufacture and Biofabrication	20	20			7	Block

2. Assessment methods

Details of the assessment pattern for each module are explained in the module outline.

For the purpose of professional accreditation, the University's Education Committee has approved a variation in Postgraduate (Taught) Examination Convention G.94 to the effect that a candidate who passes all core modules and fails up to 20 credits of non-core modules is recommended, as of right, for the award of an appropriate Master's Degree or Postgraduate Diploma, provided that no mark is below 40 and the weighted average mark for all modules and non-module aggregated assessment is at least 50.