### DEGREE OF MASTER OF ENGINEERING IN MECHANICAL ENGINEERING WITH BIOMECHANICS

#### 07H35054

Students must also comply with the University General Regulations and the Supplementary Regulations for the Degree of Master of Engineering

## All the courses listed below are prescribed for this degree

PROGRAMME YEAR 1 – 120 Credit Points					
First Half Session			Second Half Session		
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points
PD 1002	Getting started at the University of Aberdeen	0			
EG 1008	Principles of Electronics	15	EE 1501	Electronics Design	15
EG 1010	CAD and Communication in Engineering Practice	15	EG 1504	Engineering Mathematics 1	15
EG 1012	Fundamentals of Engineering Materials	15	EG 1510	Fundamental Engineering Mechanics	15
Plus 15 credit points from courses of choice at Levels 1 or 2		Plus 15 credit points from courses of choice at Levels 1 or 2			

#### PROGRAMME YEAR 2 - 120 Credit Points First Half-Session Second Half-Session Credit Course Credit Course **Course Title Course Title** Code Points Code Points Fluid Mechanics and EG 2004 15 EA 2502 Solids and Structures 15 Thermodynamics Design and Computing in EG 2011 Process Engineering 15 EG 2501 15 Engineering Practice EG 2012 **Engineering Mathematics 2** 15 EG 2503 Electrical and Mechanical Systems 15 Plus 15 credit points from courses of choice at Levels 1 or 2 Plus 15 credit points from courses of choice at Levels 1 or 2

PROGRAMME YEAR 3 – 120 Credit Points					
First Half-Session			Second Half-Session		
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points
EG 3007	Engineering Analysis and Methods	15	EA 3518	Mechanics of Structures	15
	1A		EG 3599	Project & Safety Management	10
EM 3015	Stress Analysis A	15	EM 3511	Dynamics 1	15
EM 3019	Fluid Mechanics	15	EM 3521	Engineering Thermodynamics	10
EM 3028	Engineering Materials	15	EM 3522	Design of Mechanical Elements	10

PROGRAMME YEAR 4 – 120 Credit Points							
First Half-Session			Second Half-Session				
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points		
EG 4013	ME	ng Individual	Project (See	Note 4)	45		
EM 40JJ	Fluid Dynamics	10					
EM 40JP	Dynamics 2	15	Plus 30 credit points from courses of choice at Level 3 or 4.				
EM 40JN	Heat and Momentum Transfer	10					
EM 4030	Nonlinear Solid Mechanics	10					
	OR						
First Half-Sess	ion	Second Half-Session					
Course	Course Title	Credit	Course	Course Title	Credit		
Code		Points	Code	Code			
					FUIIIS		
EM 40JJ	Fluid Dynamics	10			Folitis		
EM 40JJ EM 40JP	Fluid Dynamics Dynamics 2	10 15			Foints		
EM 40JJ EM 40JP EM 40JN	Fluid Dynamics Dynamics 2 Heat and Momentum Transfer	10 15 10	EG 4513	Individual Project Abroad (MEng)	60		
EM 40JJ EM 40JP EM 40JN EM 4030	Fluid Dynamics Dynamics 2 Heat and Momentum Transfer Nonlinear Solid Mechanics	10 15 10 10	EG 4513	Individual Project Abroad (MEng)	60		

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PROGRAMME YEAR 5 – 120 Credit Points					
First Half-Session			Second Half-Session		
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points
EG 501V	Computational Fluid Dynamics	15	EG 5565	MEng Group Design	30
EG 501W	The Engineer in Society	15	EG 555L	Modelling of Biological Systems	15
EG 505K	Biomaterials for Medical Devices and Implants	15	EG 555K	Rehabilitation Engineering and	15
EM 501Q	Advanced Composite Materials	15		Diomechanics	

Notes				
1.	This programme will seek accreditation by the IMechE at the earliest opportunity.			
2.	All course choices at level 2 and above are subject to students holding the appropriate pre- requisites.			
3.	Candidates seeking entry to the Junior Honours programme (Programme Year 3) must have accumulated, by award or recognition, or been exempted from, at least 240 credit points at levels 1 and 2, including all courses prescribed for this degree programme. Candidates who do not meet this progression requirement but who do meet the requirements for progression to Programme Year 3 of the DEGREE OF BACHELOR OF SCIENCE IN ENGINEERNG (MECHANICAL) may transfer to this programme with a view to transferring back to an honours programme for the commencement of Programme Year 4. Candidates seeking to progress on, or transfer to, the MEng programme will, in addition to meeting the credit requirements set out in the General and Supplementary Regulations, be expected to meet the MEng GPA requirements as publicised in the School of Engineering Undergraduate Student Handbook.			
4.	EG4013 will commence in 1 <sup>st</sup> Half-Session and credits will be awarded at the 2 <sup>nd</sup> Half-Session examination diet. It is an expectation that candidates allocate the equivalent of 15 credit points of effort to EG4013 during the 1 <sup>st</sup> Half-Session and 30 credit points of effort during the 2 <sup>nd</sup> Half-Session.			