

DEGREE OF MASTER OF ENGINEERING IN MECHANICAL AND ELECTRICAL ENGINEERING (07HH3M54)

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 1001	Professional Skills Part 1	0	EE 1501	Electronics Design	15
EG 1008	Principles of Electronics	15			
EG 1010	CAD and Communications in Engineering Practice	15	EG 1504	Engineering Mathematics 1	15
EG 1012	Fundamentals of Engineering Materials	15	EG 1510	Fundamental Engineering Mechanics	15
Plus 30 credit points from courses of choice.					

PROGRAMME YEAR 2 – 120 Credit Points					
First Half-Session			Second Half-Session		
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points
EG 2004	Fluid Mechanics and Thermodynamics	15	EA 2502	Solids and Structures	15
			EE 2504	Electronic Systems	15
EG 2011	Process Engineering	15	EG 2501	Design and Computing in Engineering Practice	15
EG 2012	Engineering Mathematics 2	15	EG 2503	Electrical and Mechanical Systems	15
Plus 15 credit points from courses of choice.					

PROGRAMME YEAR 3 – 120 Credit Points					
First Half-Session			Second Half-Session		
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points
EE 3043	Control Systems	15	EE 3557	Electrical Power Engineering	15
EG 3007	Engineering Analysis and Methods 1A	15	EG 3599	Project & Safety Management	10
			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

PLEASE SEE OVER →

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	MEng Individual Project				45
EE 4017	Sensing and Instrumentation	10	EM 4529	Nonlinear Mechanics	15
EE 40FE	Electrical Machines and Drives (see Note 2)	10			
EM 40JJ	Fluid Dynamics	10			
Plus 30 credit points from courses of choice.					
OR					
First Half-Session			Second Half-Session		
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points
EE 4017	Sensing and Instrumentation	10	EG 4513	Individual Project Abroad	60
EE 40FE	Electrical Machines and Drives (see Note 2)	10			
EM 40JJ	Fluid Dynamics	10			
Plus 30 credit points from courses of choice in first half session.					

PROGRAMME YEAR 5 – 120 Credit Points					
First Half-Session			Second Half-Session		
Course Code	Course Title	Credit Points	Course Code	Course Title	Credit Points
EE 501T	Advanced Control Engineering (See Note 2)	15	EG 5565	MEng Group Design	30
EG 501W	The Engineer in Society	15	EG 55P6	Engineering Risk and Reliability Analysis	15
EM 501Q	Advanced Composite Materials	15	Plus one course from the below:		
EE 5046	Optical Systems and Sensing	15			
EG 501V	Computational Fluid Dynamics	15	EG 551T	Mathematical Optimisation	15
			EG 55F2	Pipelines and Soil Mechanics	15
			EG 55F6	Risers Systems and Hydrodynamics	15

Notes	
1.	This programme is accredited by the IMechE and IET as fully satisfying the educational base for a chartered Engineer (CEng)
2.	All course choices at Level 2 and above are subject to students holding the appropriate pre-requisites.
3.	<p>Candidates seeking entry to the Junior Honours programme must have accumulated, by award or recognition, or been exempted from, at least 225 credit points at levels 1 and 2, including those compulsory courses required to enter programme year 3.</p> <p>If missing one compulsory course which is a pre requisite course for level 3, Head of School approval will be required to progress into Junior Honours, if approval is not granted students would progress onto programme year 3 on the BScEng degree programme.</p> <p>Students will also be expected to meet the standards required for MEng as publicised in the Student Handbook.</p>