## Major Code: T164 UCD Master of Engineering (ME) in Energy Systems Engineering Sample Modular Structure for 12-Month 90-Credit Programme (Guidance Notes for UCD BE (Electrical / Electronic) Graduates)

	Semester 1	Comment	Core	Option	Sem-		Semester 2	Comment	Core	Option	
<u>-</u>	Energy Systems & Climate Change (unless		Credits	Credits	ester	<u> </u>	Chemical Processes of Sustainable and		Credits	Credits	ester
MEEN40090	already taken)		5		1	CHEN40440	Renewable Energy		5		2
EEEN40080	Power System Operation		5		1	MEEN40200	Energy Systems in Buildings II		5		2
GEOL40310	Fossil Fuels, Carbon Capture & Storage		5		1	BMGT30090	Entrepreneurship in Action			5	2
EEEN40400	Wind Energy	Incompatible with EEEN40110 Renewable Energy Systems (which may be taken instead)	5		1	MEEN40670	Technical Communication			5	2
MEEN40560	Research Skills and Techniques*		5		1	MEEN40820	Technical Communication (online)			5	1
MEEN30100	Engineering Thermodynamics II		5		1	PHYC30090	Nuclear Physics			5	2
MEEN40010	Engineering Thermodynamics III			5	1	BSEN30030	Air Pollution			5	2
MEEN40020	Mechanics of Fluids II			5	1	EEEN40120	Applications of Power Electronics	Pre-requisites apply		5	2
CVEN20030	Environmental Engineering Fundamentals			5	1	EEEN30070	Power System Engineering	Pre-requisites apply		5	2
MEEN 20050	Heat Transfer			5	1	ECON42360	Energy Economics and Policy			5	2
EEEN 30090	Electrical Machines	Pre-requisites apply		5	1						
EEEN40100	Power Electronics and Drives	Pre-requisites apply		5	1						
MEEN40670	Technical Communication			5	1						
MEEN40820	Technical Communication (online)			5	1						
EEEN40550	Power System Dynamics & Control	Pre-requisites apply		5	1						
EEEN40310	Power Electronics Technology	Pre-requisites apply		5	1						
EEEN40090	Power System Design	Pre-requisites apply		5	1						
EEEN40580	Optimisation Techniques for Engineers			5	1						
MEEN40210	Energy in Transport			5	1						
EEEN40300	Entrepreneurship in Engineering			5	1						
	SEMESTER CREDIT TOTALS		30	5			SEMESTER CREDIT TOTALS		10	20	
	Semester 3 (SUMMER)	Comment	Core Credits	Option Credits	Sem- ester						
Option Rule:	Students must register for one of the following Research Project Modules										
EEEN40360	ME (Electrical Energy) Project - 90 Credit Programme (Summer)*	*This module incorporates a Research Skills element and is incompatible with "MEEN40560 Research Skills and Techniques"	30		3						
MEEN40550	ME (Energy) Research Project - 90 Credit Programme (Summer)		30		3						
	SEMESTER CREDIT TOTALS		35								