

BIRLA INSTITUTE OF TECHNOLOGY- MESRA, RANCHI

REVISED COURSE STRUCTURE - To be effective from academic session 2021-22

Based on CBCS & OBE Model

Recommended scheme of study for M.Tech Energy Technology Engineering

SEMESTER / Session of Study (Recommended)	Course Level	Category of Course	Course Code	Courses	Mode of delivery & credits <i>L-Lecture; T-Tutorial; P-Practicals</i>			Total Credits <i>C- Credits</i>		
					L <i>(Periods/week)</i>	T <i>(Periods/week)</i>	P <i>(Periods/week)</i>	C		
				THEORY						
FIRST / Monsoon	Fifth	Programme Core (PC)	ME541	Renewable Sources of Energy	3	0	0	3		
			ME542	Fuel Technology	3	0	0	3		
			ME543	Energy Conversion System	3	0	0	3		
			ME549	Energy Simulation and Modelling	3	0	0	3		
				Programme Elective (PE I)	ME544	Wind Energy	3	0	0	3
					ME545	Solar Passive Architecture	3	0	0	
					ME546	Hydrogen Energy System	3	0	0	
						LABORATORIES				
			Fifth	Programme Core (PC)	ME547	Energy Laboratory I	0	0	4	2
						ME548	Computational Lab	0	0	4
				TOTAL				19		

SECOND/ Spring	Fifth	Programme Core (PC)	EE597	Power Generation, Transmission and Distribution	3	0	0	3	
			ME553	Economics and Planning of Energy Systems	3	1	0	4	
			ME554	Energy Management and Auditing	3	1	0	4	
		Program Elective (PE II)	ME555	Energy Storage Technology	3	0	0	3	
			ME571	Convective Heat & Mass Transfer	3	0	0		
			ME557	Integrated Energy System	3	0	0		
		Programme Elective (PE III)	ME550	Bioconversion and Processing of Waste	3	0	0	3	
			ME551	Solar Photovoltaic System	3	0	0		
			ME552	Nuclear Energy	3	0	0		
			ME559	Energy, Ecology and Environment	3	0	0		
				LABORATORIES					
	Fifth	Programme Core (PC)	ME558	Energy Laboratory II	0	0	4	2	
		TOTAL							19

THIRD / Monsoon	Sixth	Programme Core (PC)	ME600	Thesis (Part I)				8
		Open Elective (OE)		OE I / MOOC I	3	0	0	3
				OE II / MOOC II	3	0	0	3
		TOTAL						14
FOURTH/ Spring	Sixth	Programme Core (PC)	ME650	Thesis (Part II)				16
		TOTAL						16
GRAND TOTAL FOR M.TECH PROGRAMME (38 + 30)								68

** Programme Core and Programme Elective brought to 1st and 2nd semester for restructuring may be interchanged, if required.*