Master of Technology

(Clean Technology)

Duration – 2 Years Full Time

Programme Structure

2017-19

PROGRAMME STRUCTURE OF M.TECH. (CLEAN TECHNOLOGY)

Semester I

Course Code	Course Title	Lecture per week	Practical per week	Credit
MTC 101	Introduction to Solar, Thermal, & Other Non-conventional Renewable Energy Sources; Heat & Thermodynamics	4		4
MTC 102	Introduction to Electronics Devices & Circuits	3		3
MTC 103	Semi conductor Device Fabrication Technologies	4		3
MTC 104	Introduction to Materials & their science	3		3
MTC 105	Instrumentation Techniques & Characterization	4		4
MTC 120	Practical-I		10	5
MTC 141	Communication Skills-I	1		1
MTC 143	Behavioural Science-I	1		1
MTC 145	Foreign Language-I	2		2
	German			

Semester II

Course Code	Course Title	Lecture per week	Practical per week	Credit
MTC 201	Energy Production	3		3
MTC 202	Energy Efficiency, Conversion, and Sustainability	3		3
MTC 203	Clean Power Project Management	4		4
MTC 204	Information Technologies for Clean Energy Project Management	3		3
MTC 205	Integrated Approach to Sustainable Engineering	4		4
MTC 255	Seminar and Project			5
MTC 220	Energy Laboratory –II		10	5
MTC 241	Communication Skills-II	1		1
MTC 243	Behavioural Science-II	1		1

MTC 245	Foreign Language-II	2		2

Semester III

Course Code	Course Title (Electives)	Lecture per week	Practical per week	Credit
MTC 301	Clean Energy Technologies – I - Solar	4		4
MTC 302	Clean Energy Technologies – I - Wind	4		*
MTC 303	Clean Energy Technologies – I - Hydro	4		*
MTC 304	Clean Energy Technologies – I - Biomass	4		*
MTC 310	Energy Management and Energy Efficiency	4		4
MTC 311	Water Resource Management and Technologies	4		4
MTC 312	Waste Management and Technologies	4		4
MTC 370	Minor Project			6
MTC320	Practical		10	5
MTC 341	Communication Skills-III	1		1
MTC 343	Behavioural Science-III	1		1
MTC 345	Foreign Language-III	2		2
MTC 350	Summer Training (Evaluation)			9

- **The student will choose one of the 4 electives**

Semester IV

Course Code	Course Title	Lecture per week	Practical per week	Credit
MTC 455	Clean Energy Technology Dissertation			30