

1. Course Scheme

MASTER OF ENGINEERING IN RENEWABLE ENERGY

COURSE DISTRIBUTION

Core Courses	02	06 Credit Hours
Elective Courses	03	09 Credit Hours
Additional Courses	02	06 Credit Hours
Mathematics Courses	01	03 Credit Hours
University Core Courses	02	06 Credit Hours
Thesis	--	09 Credit Hours
Total		39 Credit Hours

CORE COURSES

S. No.	Course	Credit Hours
1.	Photovoltaic Power System Design	3
2.	Wind Power System	3

ELECTIVE COURSES

S. No.	Course	Credit Hours
1.	Biomass Engineering	3
2.	New Energy Materials and Devices	3
3.	Solid Waste Management	3
4.	Water Resource Management	3

ADDITIONAL COURSES

As recommended for research area of thesis (If not taken in Undergrad)		
S. No.	Course	Credit Hours
1.	Electrical Machines	3
2.	Power Electronics	3
3.	Heat Transfer	3
4.	Fluid Mechanics	3
5.	Alternate Energy Engineering	3
6.	Electricity, Transmission, Distribution and Storage	3
7.	General Chemistry	3
8.	Solid State Physics	3
9.	Nano Technology	3

MATHEMATICS COURSE

S. No.	Course	Credit Hours
1.	Advanced Engineering Mathematics	3 (3+0)

Semester Wise Course Scheme

M.E in Renewable Energy			
Course Code	Semester-I (Renewable Energy)	Pre- req	CHR
ELE-511	Power Electronics ¹	--	3
ELE-512	Electrical Machines ¹	--	3
MEC-511	Fluid Mechanics ²	--	3
MEC-512	Heat Transfer ²	--	3
	Academic Reading & Writing		3
	Advanced Computational Mathematics		3
	Total		12
Course Code	Semester-II (Renewable Energy)	Pre- req	CHR
RES-521	Photovoltaic Power System Design	--	3
RES-522	Wind Power System	--	3
MTS-511	Advanced Engineering Mathematics	--	3
RES-511	New Energy Materials and Devices	--	3
	Total		12
Course Code	Semester-III&IV Thesis	Pre- req	CHR
RES-523	Solid Waste Management	--	3
RES-524	Water Resource Management	--	3
RES-610	ME- Thesis	--	9

Note: 1 courses for students having major in Mechanical engineering, 2 courses for students having major in Electrical engineering.