

### Breakup of Courses

S. No	Category	Total number of Credits
1	University Core	7
2	Programme Core	50
3	Programme Elective	15
<b>Minimum Qualifying Credits</b>		<b>72</b>
<b>Total Credits Offered</b>		<b>72</b>

### University Core

S. No.	Course Code	Course Title	L	T	P	C
1	ENG551/FR E501/GER50 1/ESP501/JA P501	Professional and Communication Skills (or) Foreign Language	0	0	4	2
			2	0	0	2
2	ENE-511/ MAT-502	Quantitative Analysis in Energy and Environment/Advance Numerical & Statistical Methods	3	1	0	4
3	GUC501	Seminar	-	-	-	1
<b>Total Credits</b>						<b>7</b>

### Programme Core

S.No	Course Code	Course Title	L	T	P	C
1	ENE512	Renewable Energy Technology	3	0	2	4
2	ENE513	Physico-chemical, Biological Principles and Processes	4	0	0	4
3	ENE514	Environmental Quality Monitoring	2	0	4	4
4	ENE515	Energy Auditing, Conservation & Management	3	0	0	3
5	ENE521	Energy, Instrumentation, Measurement & Control	2	0	2	3
6	ENE522	Environmental Audit & Impact Assessment	3	0	0	3
7	ENE523	Deign of Water & Wastewater Treatment Systems	2	0	4	4
8	ENE524	Air Pollution & Its Control	3	0	0	3

9	ENE600	Comprehensive Examination	-	-	-	<b>2</b>
10	ENE650	Research Project	-	-	-	<b>20</b>
		<b>Total Credits</b>				<b>50</b>

### Programme Electives-Energy

SNo.	Course Code	Course Title	L	T	P	C
1	ENE532	Electrical Energy Management	3	0	0	3
2	ENE532	Wind Energy Technologies	3	0	0	3
3	ENE533	Small Hydro-power Systems	3	0	0	3
4	ENE534	Solar Energy Technologies	3	0	0	3
5	ENE535	Alternative Fuels	3	0	0	3
6	ENE536	Hydrogen & Fuel Cells	3	0	0	3
7	ENE537	Nuclear Power Engineering	3	0	0	3
8	ENE538	Design of Thermal Systems	3	0	0	3
9	ENE539	Power Plant Engineering	3	0	0	3
10	ENE591	Energy, Environment Climate Change	3	0	0	3
11	ENE592	Energy in Built Environment	3	0	0	3
11	ENE671	Measurements & Measuring Instruments	3	0	0	3
12	ENE672	Fuels & Combustion	3	0	0	3
13	ENE673	Energy Project & Evaluation	3	0	0	3
14	ENE674	Energy Systems, Modeling& Analysis	3	0	0	3
15	ENE675	Thermodynamics, Heat Transfer & Fluid Flow	3	0	0	3
16	ENE676	Advanced Heat Transfer	3	0	0	3
17	ENE677	Bio-Energy Technologies	3	0	0	3
18	ENE678	Advance Power Electronic Convertors	3	0	0	3
19	ENE679	Energy Efficient Buildings	3	0	0	3
20	MEE514	Computational Fluid Dynamics	3	0	0	3
		Total Credits (5 courses)				15

### Programme Electives-Environment

SNo.	Course Code	Course Title	L	T	P	C
1	ENE561	Earth and Environment	3	0	0	3
2	ENE562	Solid Waste Management	3	0	0	3
3	ENE563	Hazardous Waste Management & Risk Assessment	3	0	0	3
4	ENE564	Design of Wastewater Treatment & Disposal System	3	0	0	3
5	ENE565	Urban Environmental Quality Management	3	0	0	3
6	ENE566	Environmental Geo-technology	3	0	0	3
7	ENE567	Remote Sensing & GIS Applications	3	0	0	3
8	ENE568	Application of Bio-technology in Environmental Engineering	3	0	0	3
9	ENE569	Risk Assessment and Disaster Management	3	0	0	3
10	ENE681	Mathematical Modeling in Environmental Engg.	3	0	0	3
11	ENE682	Clean Development Mechanism & Green Technologies	3	0	0	3
12	ENE683	Environmental Ecology	3	0	0	3
13	ENE684	Design of Water Supply Treatment and Treatment Systems	3	0	0	3
14	ENE685	Emerging Trends in Waste Treatment	3	0	0	3
15	ENE686	Eco-hydrology & Pollute Transport	3	0	0	3
16	ENE687	Fate and Transport of Contaminants in Natural Systems	3	0	0	3
17	ENE688	Environmental Economics, Legislation and Management	3	0	0	3
18	ENE691	Atmospheric Processes & Climate Change	3	0	0	3
		<b>Total Credits (5 courses)</b>				<b>15</b>