

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**  
**M. Tech in ENVIRONMENTAL ENGINEERING**  
**Effective from Academic Year 2022 - 2023 admitted batch**

**R22 COURSE STRUCTURE AND SYLLABUS**

**I YEAR I – SEMESTER**

S. No	Course Code	Course Title	L	T	P	Credits
1	Professional Core - I	Waste Water Engineering	3	0	0	3
2	Professional Core - II	Environmental Chemistry and Microbiology	3	0	0	3
3	Professional Elective - I	1. Computational and Statistical Methods 2. Environmental System Engineering 3. Eco system-based disaster risk reduction	3	0	0	3
4	Professional Elective - II	1. Remote Sensing and GIS 2. Environmental Impact Assessment 3. Water Supply Systems	3	0	0	3
5	Lab - I	Water and Waste water Lab	0	0	4	2
6	Lab - II	Microbiology lab	0	0	4	2
7		Research Methodology & IPR	2	0	0	2
8	Audit - I	Audit Course- I	2	0	0	0
		<b>Total</b>	<b>16</b>	<b>0</b>	<b>8</b>	<b>18</b>

**I YEAR II – SEMESTER**

S. No	Course Code	Course Title	L	T	P	Credits
1	Professional Core - III	Air pollution and Control	3	0	0	3
2	Professional Core - IV	Solid and Hazardous waste Management	3	0	0	3
3	Professional Elective - III	1. Water quality modeling 2. Environmental Hydrology 3. Environmental Structures	3	0	0	3
4	Professional Elective - IV	1. Climate Change Modeling 2. Industrial Waste Management 3. Remediation Technologies	3	0	0	3
5	Lab - III	Air Quality Management Lab	0	0	4	2
6	Lab - IV	Computational Lab	0	0	4	2
7		Mini Project with Seminar	0	0	4	2
8	Audit-II	Audit Course- II	2	0	0	0
		<b>Total</b>	<b>14</b>	<b>0</b>	<b>12</b>	<b>18</b>

**II YEAR I – SEMESTER**

S. No	Course Code	Course Title	L	T	P	Credits
1	Professional Elective - V	1. Environmental Biotechnology 2. Instrumental Methods of Analysis 3. Rural Water Supply and Environmental Sanitation	3	0	0	3
2	Open Elective	Open Elective	3	0	0	3
3	Dissertation	Dissertation Work Review - II	0	0	12	6
		<b>Total</b>	<b>6</b>	<b>0</b>	<b>12</b>	<b>12</b>

**II YEAR II - SEMESTER**

<b>S. No</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
1	Dissertation	Dissertation Work Review - III	0	0	12	06
2	Dissertation	Dissertation Viva-Voce	0	0	28	14
		<b>Total</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>20</b>

**Open Electives Offered by the Department:**

1. Wealth From Waste
2. Environmental Pollution
3. Health & Hygiene