

## Department of Environmental Science & Engineering

### Details of Institute Core (IC) Courses

Institute Core (IC) Courses				
S. No.	Course Code	Course Name	L-T-P	Course Type
1	<a href="#">ESI101</a>	Environmental Sciences	2-0-0	Modular

### Details of Departmental Compulsory (DC) Courses

Departmental Compulsory (DC) Courses				
S. No.	Course Code	Course Name	L-T-P	Course Type
1	<a href="#">ESC201</a>	Drinking Water Supply and Treatment	3-0-0	Theory
2	<a href="#">ESC202</a>	Air Pollution	3-0-0	Theory
3	<a href="#">ESC203</a>	Noise Pollution and Control	3-0-0	Theory
4	<a href="#">ESC204</a>	Geology and Land use Planning	3-0-0	Theory
5	<a href="#">ESC205</a>	Introduction Ecology and Environmental Microbiology	3-0-0	Theory
6	<a href="#">ESC206</a>	Environmental Policy and Legislation	3-0-0	Theory
7	<a href="#">ESC207</a>	Air Pollution Control	3-0-0	Theory
8	<a href="#">ESC251</a>	Water Pollution Practical	0-0-2	Practical
9	<a href="#">ESC252</a>	Air and Noise Pollution Practical	0-0-2	Practical
10	<a href="#">ESC253</a>	Geology Practical	0-0-2	Practical
11	<a href="#">ESC254</a>	Soil and Environmental Microbiology Practical	0-0-2	Practical
12	<a href="#">ESC308</a>	Environmental Geotechnology	3-0-0	Theory
13	<a href="#">ESC309</a>	Wastewater Treatment	3-0-0	Theory
14	<a href="#">ESC310</a>	Environmental Impact Assessment	3-0-0	Theory
15	<a href="#">ESC311</a>	Solid Waste Management	3-0-0	Theory
16	<a href="#">ESC312</a>	Geoinformatics	3-0-0	Theory
17	<a href="#">ESC355</a>	Environmental Geotechnology Practical	0-0-2	Practical
18	<a href="#">ESC356</a>	Wastewater Engineering Practical	0-0-2	Practical
19	<a href="#">ESC357</a>	Solid Waste Management Practical	0-0-2	Practical
20	<a href="#">ESC358</a>	Geoinformatics Practical	0-0-2	Practical
21	ESC401	Project - I	0-0-0 (6)	Non-Contact
22	ESC402	Project - II	0-0-0 (6)	Non-Contact
23	<a href="#">ESC501</a>	Ecology and Environmental Microbiology	3-0-0	Theory
24	<a href="#">ESC502</a>	Water Supply and Treatment	3-0-0	Theory
25	<a href="#">ESC503</a>	MATLAB Programming for Numerical Computation	3-0-0	Theory
26	<a href="#">ESC504</a>	Air and Noise Pollution	3-0-0	Theory
27	<a href="#">ESC505</a>	Wastewater Engineering	3-0-0	Theory
28	<a href="#">ESC506</a>	Environmental Laws and Impact Assessment	3-0-0	Theory
29	<a href="#">ESC507</a>	Municipal Solid Waste Management	3-0-0	Theory
30	<a href="#">ESC508</a>	Instrumental Technique in Environmental Analysis	3-0-0	Theory
31	<a href="#">ESC521</a>	Water Chemistry Practical	0-0-3	Practical
32	<a href="#">ESC522</a>	Air and Noise Monitoring Practical	0-0-3	Practical
33	<a href="#">ESC523</a>	Water and Wastewater Engineering Practical	0-0-3	Practical
34	<a href="#">ESC524</a>	Soil and Microbiology Practical	0-0-3	Practical
35	<a href="#">ESC525</a>	Environmental Chemistry	3-0-0	Theory
36	<a href="#">ESC526</a>	Research Methodology	3-0-0	Theory
37	ESC597	Thesis	0-0-0 (36)	Audit
38	ESC598	Thesis	0-0-0 (18)	Practical
39	ESC599	Thesis	0-0-0	Audit
40	ESS001	Internship/Training/Seminar/Field-Excursion	0-0-0	Non-Contact
41	ESS401	Internship	0-0-0 (S/X)	Audit

### Details of Engineering Science Option (ESO) Courses

Engineering Science Option (ESO) Courses				
S. No.	Course Code	Course Name	L-T-P	Course Type
1	<a href="#">ESE201</a>	Pollution Control and Management	3-0-0	Theory
2	<a href="#">ESE202</a>	Atmospheric Science and Climate Change	3-0-0	Theory

### Details of Departmental Elective (DE) Courses

Departmental Elective (DE) Courses				
S. No.	Course Code	Course Name	L-T-P	Course Type
1	<a href="#">ESD401</a>	Biodiversity Conservation	3-0-0	Theory

2	<a href="#">ESD402</a>	Industrial Waste Water Engineering	3-0-0	Theory
3	<a href="#">ESD403</a>	Waste to Energy	3-0-0	Theory
4	<a href="#">ESD404</a>	Water Resource Planning and Management	3-0-0	Theory
5	<a href="#">ESD405</a>	Climate Vulnerability and Risk Analysis	3-0-0	Theory
6	<a href="#">ESD406</a>	Environmental Nano Technology	3-0-0	Theory
7	<a href="#">ESD501</a>	Environmental Geology and Resource Management	3-0-0	Theory
8	<a href="#">ESD502</a>	Environmental Biotechnology	3-0-0	Theory
9	<a href="#">ESD503</a>	Environmental Modelling	3-0-0	Theory
10	<a href="#">ESD504</a>	Green Engineering Concepts and Life Cycle Analysis	3-0-0	Theory
11	<a href="#">ESD505</a>	Advanced Water and Wastewater Treatment	3-0-0	Theory
12	<a href="#">ESD506</a>	Biomedical and Hazardous Waste Management	3-0-0	Theory
13	<a href="#">ESD507</a>	Environmental Biogeochemistry	3-0-0	Theory
14	<a href="#">ESD508</a>	Social Impact Assessment and R&R	3-0-0	Theory
15	<a href="#">ESD509</a>	Air and Noise Pollution Control	3-0-0	Theory
16	<a href="#">ESD510</a>	Soil Pollution and Restoration	3-0-0	Theory
17	<a href="#">ESD511</a>	Aerosols in the Atmosphere	3-0-0	Theory
18	<a href="#">ESD512</a>	Groundwater Flow and Contaminant Transport Modelling	3-0-0	Theory
19	<a href="#">ESD513</a>	Energy Auditing and Management	3-0-0	Theory

### Details of Open Elective (OE) Courses

Open Elective (OE) Courses				
S. No.	Course Code	Course Name	L-T-P	Course Type
1	<a href="#">ESO301</a>	Applied Statistics for Environmental Engineering	3-0-0	Theory
2	<a href="#">ESO303</a>	Occupational Health, safety and Risk Assessment	3-0-0	Theory
3	<a href="#">ESO401</a>	Climate Change Impacts on Water Resources	3-0-0	Theory
4	<a href="#">ESO404</a>	Sustainability Engineering	3-0-0	Theory
5	<a href="#">ESO405</a>	Cleaner Energy	3-0-0	Theory
6	<a href="#">ESO501</a>	Environmental Management System and Auditing	3-0-0	Theory
7	<a href="#">ESO502</a>	Environmental Aspects of Industries	3-0-0	Theory
8	<a href="#">ESO504</a>	Environmental Remote Sensing & GIS	3-0-0	Theory
9	<a href="#">ESO505</a>	Climate Change and Modelling	3-0-0	Theory
10	<a href="#">ESO506</a>	Geo-Environmental Engineering	3-0-0	Theory