

Department of Environmental Science and Engineering

M.Sc. Environmental Science and Engineering

Curriculum

(Applicable to the students admitted from AY: 2025 onwards)



School of Engineering and Sciences

SRM University AP, Andhra Pradesh

ABBREVIATIONS

AEC	Ability Enhancement Courses
VAC	Value Added Courses
SEC	Skill Enhancement Courses
FIC	Foundation & Interdisciplinary Courses
OE	Open Elective
RDIP	Research / Design / Industrial Practice / Project / Thesis / Internship
CE	Core Elective
CC	Core Course
SE	Stream Elective
TE	Technical Elective

SEMESTER - I							
S. No	Category	Sub- Category	Course Title	L	T/D	P/Pr	C
1	SEC	S SEC	Statistics	3	1	0	4
2	Core	CC	Environmental Issues, Climate Change, and Sustainable Development	4	0	0	4
3	Core	CC	Earth and Planetary Processes	3	0	0	3
4	Core	CC	Environmental Pollution	3	0	0	3
5	Core	CC	Ecology and Biodiversity	4	0	0	4
6	Core	CC	Environmental Laboratory – I	0	0	3	3
Semester Total				17	1	3	21

SEMESTER - II							
S. No	Category	Sub- Category	Course Title	L	T/D	P/Pr	C
1	SEC	S SEC	Introduction to R and Python	3	0	1	4
2	SEC	S SEC	Research methodology	3	0	0	3
3	Core	CC	Solid Waste Management	3	0	0	3
4	Core	CC	Energy and Environment	3	0	0	3
5	Core	CC	Environmental Chemistry and Microbiology	4	0	0	4
6	Core	CC	Environmental Laboratory – II	3	0	0	3
7	Core	CC	Core Elective	3	0	0	3
Semester Total				22	0	1	23

SEMESTER - III							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	AEC	S AEC	Research seminar and Report writing	3	0	0	3
2	AEC	S AEC	Design thinking	2	0	0	2
3	Core	CC	Environmental Impact Assessment and Audits	3	0	0	3
4	Core	CC	Geospatial Technologies for Environmental Applications	3	0	0	3
5	Elective	CE	Core Elective	3	0	0	3
6	Elective	CE	Core Elective	3	0	0	3
7	Elective	CE	Core Elective	3	0	0	3
8	Elective	CE	Core Elective	3	0	0	3
9	RDIP	RDIP	Summer Internship	0	0	2	2
Semester Total				23	0	2	25

SEMESTER - IV							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	RDIP	RDIP	Dissertation	0	0	14	14
Semester Total				0	0	14	14

Core Electives							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	Elective	CE	Freshwater Resources	3	0	0	3
2	Elective	CE	Introduction to Limnology and Oceanography	3	0	0	3
3	Elective	CE	Hydro informatics	3	0	0	3
4	Elective	CE	Applied Hydrogeology	3	0	0	3
5	Elective	CE	Aquatic Microbial Ecology and Biogeochemistry	3	0	0	3
6	Elective	CE	Wastewater Treatment	3	0	0	3
7	Elective	CE	Soil Pollution and Remediation Measures	3	0	0	3
8	Elective	CE	Water Contaminants: Sources, Transport and Remediation Strategies	3	0	0	3
9	Elective	CE	Membrane Technology for Industrial Water Treatment	3	0	0	3
10	Elective	CE	Agriculture, Food Security and Climate Change	3	0	0	3
11	Elective	CE	Carbon Sequestration	3	0	0	3
12	Elective	CE	Ecosystem Restoration	3	0	0	3
13	Elective	CE	Urban Mining and Sustainability	3	0	0	3
14	Elective	CE	Biomass Energy	3	0	0	3
15	Elective	CE	Bioeconomy	3	0	0	3
16	Elective	CE	Process Design and Systems Analysis	3	0	0	3