

CENTRAL UNIVERSITY OF RAJASTHAN

Syllabus

Name of Programme- M.Sc. (2 years)/Integrated M.Sc. (5 years) Environmental Science

4 Semesters

Semester – I /VII

S. No.	Course Code	Course Title	Type of Course (C/E)	L	I.L.	P	Credits
1	MSE 101	Ecology and Environment	C	3			3
2	MSE 102	Natural Resources, Biodiversity and Wildlife Conservation	C	3			3
3	MSE 103	Environmental Chemistry	C	3			3
4	MSE 104	Environmental Geoscience	C	3			3
5	MSE 105	Environmental Policies, Legislation and Sustainable Development	C	3			3
6	MSA 101	Fundamentals of Atmosphere, Land and Ocean	C	3			3
7	MSE 106	Environmental Pollution	C	3			3
8	MSE 107	Environmental Laboratory-I	C			6	3
Total							24

Semester – II /VIII

S. No.	Course Code	Course Title	Type of Course (C/E)	L	I.L.	P	Credits
1	MSE 201	Instrumentation for Environmental Monitoring and Analysis	C	3			3
2	MSE 202	Air and Water Quality Management	C	3			3
3	MSE 203	Environmental Toxicology	C	3			3
4	MSA 203	Statistical Analysis and Computer Programming	C	2		2	3
5	MSE 204	Remote Sensing and GIS	C	3		2	4
6	MSE 205	Field Trip	C	1			1
7	MSE 206	Environmental Laboratory-II	C			6	3
8	MSE XXX	Elective 1*	E	3			3
Total							23

Semester – III /IX

S. No.	Course Code	Course Title	Type of Course (C/E)	L	I.L.	P	Credits
1	MSE 301	Coastal and Marine Environment	C	3			3
2	MSE 302	Environmental Impact Assessment and Management	C	3			3
3	MSA 302	Arid Environment and Desert Meteorology	C	3			3
4	MSE 303	Environmental Biotechnology	C	2		2	3
5	MSE 304	Science of Climate and Climate Change	C	3			3
6	MSE 305	Minor Project	C	2			2
7	MSE YYY	Elective 2*	E	3			3
8		Open Elective**	E	3			3
Total							23

Semester – IV/X

S. No.	Course Code	Course Title	Type of Course (C/E)	L	I.L.	P	Credits
1	MSE 401	Project	C				20
Total							20

***Elective 1**

S. No.	Course Code	Course Title	Type of Course (C/E)	L	I.L.	P	Credits
1	MSE 207	Solid Waste Management	E	3			3
2	MSE 208	Environmental Disasters and Management	E	3			3
3	MSE 209	Hydrogeology	E	3			3
4	MSE 210	Wastewater Treatment and Management	E	2		2	3
5	MSE 211	Energy and Environment	E	3			3
6	MSA 205	Simulation and Visualization in Earth Sciences	E	2		2	3
7		Massive Open Online Courses (MOOCs)	E	3			3

***Elective 2**

S. No.	Course Code	Course Title	Type of Course (C/E)	L	I.L.	P	Credits
1.	MSA 306	Aerosol and Atmospheric Chemistry	E	3			3
2	MSE 306	Environmental Modelling	E	3			3
3	MSE 307	Geoinformatics for Natural Resources Management	E	3			3
4	MSE 308	Environmental and Occupational Health	E	3			3
5	MSE 309	Nanotechnology for Pollution Mitigation	E	3			3
6	MSE 310	Water Resource Management	E	3			3
7		Massive Open Online Courses (MOOCs)	E	3			3

Note:

* Minimum 6 students are required to run elective courses (List enclosed)

** Open elective can be selected from any department of the university.

MOOCs can be selected based on the availability

CENTRAL UNIVERSITY OF RAJASTHAN

Syllabus

Name of Programme- Ph.D. in Environmental Science

1 Semesters

Semester – I

S. No.	Course Code	Course Title	Type of Course (C/E)	L	I.L.	P	Credits
1	PMSE 001	Research Methodology	C	4			4
2	PMSE 002	Advance Analytical Techniques	C	4			4
3	PMSE 101	Water Resources and Climate Change	E	4			4
4	PMSE 102	Air Pollution and Control	E	4			4
5	PMSE 103	Environmental Biotechnology	E	4			4
6	PMSE 104	Nanotechnology: Environmental Applications	E	4			4
7	PMSE 105	Geospatial Technology for Environmental Management	E	4			4
8	PMSE 106	Biogeochemistry	E	4			4
Total							12

Total Credit Requirement: 12

Compulsory Course (8 credits): PMSE 001, PMSE 002

Elective Course (4 credits): Student has to select any one course from list of elective course as per his/her requirement