

## Adamas University SCHOOL OF BASIC AND APPLIED SCIENCES

## Department of Chemistry

# PROGRAMME COURSE STRUCTURE & PROPOSED SYLLABUS FOR M.Sc. IN ENVIRONMENTAL SCIENCE AND SUSTAINABILITY

Programme Code: **CHM4203**Duration: 2 Years Full Time
Academic Year: 2025-2026

<u>Distribution of Papers Semester-wise:</u> Environmental Science and Sustainability PG-I

Semester - I						
Paper Name	Paper Code	No of Papers	Credit	L-T-P		
1. Ecology and Bioresource	EVS21041	1	3	3-0-0		
Management						
2. Natural Resources and	EVS21042	1	3	3-0-0		
Management						
3. Chemistry for Environment	EVS21043	1	3	3-0-0		
4. Concepts of Clean and Sus-	EVS21044	1	3	3-0-0		
tainable Energy						
5. Climate Change Science	EVS21045	1	2	2-0-0		
and Policy						
6. Statistics and Data Science	EVS21046	1	3	3-0-0		
in Environmental Systems						
7. Ecology and Data Analysis	EVS22047	1	4	0-0-6		
Lab						
8. Field visit	EVS24048	1	4			
Total			25			

## Environmental Science and Sustainability PG-II

Semester II				
Paper Name	Paper Code	No of Papers	Credit	L-T-P
1. Air and Noise Pollution and Control Technologies	EVS21049	1	3	3-0-0
2. Water Pollution and Control Technologies	EVS21050	1	3	3-0-0
3. Waste Management and Resource Recovery	EVS21051	1	3	3-0-0
4. Instruments for Environmental Applications (Th)	EVS21052	1	3	3-0-0
5. Environmental Impact Assessment (EIA) and Environmental Legislative Framework	EVS21053	1	3	3-0-0
6. Environmental monitoring laboratory	EVS22054	1	4	0-0-8
7. Industry Visit	EVS24055	1	3	-
8. Excursion	EVS24056	1	6	-
Total			28	

### Environmental Science and Sustainability PG-III

Semester III					
Paper Name	Paper Code	No of Papers	Credit	L-T-P	
Environmental Economics and Green     Accounting	EVS21057	1	3	3-0-0	
Environmental Geosciences and Hydrology	EVS21058	1	3	3-0-0	
3. Environmental Microbiology and Bioremediation	EVS21059	1	3	3-0-0	
4. Elective I – Land Use/Land Cover and Urbanisation	EVS21060	1	4	2-0-2	
OR					
Disaster Management and Environmental Resilience	EVS21061	1	4	4-0-0	
5. Applications of Advanced Excel, R and Python in Environmental Science	EVS22062	1	2	0-0-4	
6. Environmental Microbiology (Lab)	EVS22063	1	2	0-0-4	
7. Sustainable Finance	EVS21064	1	2	2-0-0	
8. Industry Internship	EVS24065	1	3	-	
9. Seminar on contemporary research	EVS25066	1	3	_	
Total			25		

## Environmental Science and Sustainability PG-IV

Semester IV						
Paper Name	Paper Code	No of Papers	Credit	L-T-P		
1. ESG and Nature Based Solutions	EVS21067	1	3	3-0-0		
2. Elective II- Industrial Pollution Prevention and Clean Technologies	EVS21068	1	2	2-0-0		
OR						
Design for water and wastewater systems	EVS21069	1	2	2-0-0		
3. Environmental Health, Biochemistry and Toxicology	EVS21070	1	2	2-0-0		
4. Environmental Health, Biochemistry and Toxicology Lab	EVS22071	1	2	0-0-4		
5. Comprehensive viva	EVS25072	1	4	-		
6. Dissertation	EVS25073	1	10	-		
Total			24			

**TOTAL CREDIT: 100** 

\*\*\*\* Total credit of the programme M.Sc. Environmental Science :  $25(1^{st} \text{ Sem}) + 28 (2^{nd} \text{ Sem}) + 25 (3^{rd} \text{ Sem}) + 24 (4^{th} \text{ Sem}) = 102$ 

1 N.B.: Students are highly encouraged to enroll their names for the suitable courses offered having minimum credit point 2 by UGC-MOOCs. A Vertical of SWAYAM courses as one of the skill enhancement courses. The number/grade obtained by the students following the completion of this type of courses will carry equivalent weightage/ credit for the fulfilment of their courses.