

Yashwantrao Chavan Maharashtra Open University Dnyangangotri near Gangapur Dam, Nashik, Pin Code-422222, Maharashtra(India)

# Programme Structure Scheme

For

Post Graduate, 2 Year(s) Master Degree Program in

**School of Sciences** 

## Master of Science in Environmental Science(V152 - M.Sc. in Environmental Science) (Credits System)

(2023 Pattern - NEP-Open and Distance Learning) Programme Code: V152

### Publisher's Note

This Yashwantrao Chavan Maharashtra Open University has great Pleasure in publishing this programme structure for Post Graduate programme for 2 Year(s) Master Degree Program as "Master of Science in Environmental Science" (2023 Pattern - NEP - Open and Distance Learning) under the School of "School of Sciences".

On behalf of the University, I thank experts and authorities of the University for the interest taken and the whole hearted co-operation extended by them in bringing out this publication.

Date: 6/12/2024 5:40:21 PM Yashwantrao Chavan Maharashtra Open University,Dnyangangotri near Gangapur Dam, Nashik, Pin Code-422222, Maharashtra(India)

Registrar

#### Programme Objective(s)

1. This programme has the following broad objectives:

1. Develop Advanced Knowledge: The primary objective of the postgraduate program in Environmental Studies is to provide students with advanced knowledge and a deeper understanding of various aspects of environmental science, ecology, sustainability, and environmental management.

2. Interdisciplinary Perspective: The program aims to foster an interdisciplinary perspective, enabling students to integrate knowledge from various disciplines, including biology, chemistry, geology, economics, and social sciences, to address complex environmental issues.

3. Critical Thinking and Research Skills: The program seeks to cultivate critical thinking and research skills in students, encouraging them to analyze environmental problems, conduct empirical research, and apply data-driven approaches to find sustainable solutions.

4. Environmental Policy and Governance: Students will gain insights into environmental policy frameworks, laws, and governance mechanisms to evaluate the effectiveness of environmental regulations and contribute to policy formulation.

Sustainable Development: The program aims to equip students with the tools to promote sustainable development, considering the social, economic, and ecological dimensions of environmental challenges.
Environmental Awareness and Ethics: Enhance environmental awareness and ethical values among students, emphasizing their responsibility as future environmental professionals to protect and preserve the natural world.

#### : Programme Outcome :

After successful completion of this programme, students will be able to

1. Advanced Knowledge: Graduates will demonstrate a deep understanding of key environmental concepts, principles, and theories relevant to the field of environmental studies.

2. Problem-Solving Skills: Graduates will be capable of applying scientific and analytical approaches to identify and address complex environmental issues effectively.

3. Interdisciplinary Integration: Graduates will be able to integrate knowledge from different disciplines to comprehend and resolve environmental problems with a comprehensive approach.

4. Research Proficiency: Graduates will be skilled in conducting independent research, designing experiments, collecting and analyzing data, and interpreting research findings related to environmental studies.

5. Policy Analysis: Graduates will be able to analyze environmental policies, assess their impact on environmental sustainability, and contribute to the formulation of evidence-based policies.

6. Sustainable Solutions: Graduates will demonstrate the ability to develop and propose sustainable solutions for environmental challenges, taking into account social, economic, and environmental factors.

7. Communication and Advocacy: Graduates will possess effective communication skills to convey scientific information and advocate for environmental protection and sustainable practices.

8. Environmental Leadership: Graduates will be prepared to take on leadership roles in environmental organizations, governmental agencies, research institutions, and industries related to environmental conservation and sustainability.

Sr.No.	Programme Part Name	Programme Part Abbrevation	Examination Pattern
1	Year-1	Year-1	Semester
2	Year-2	Year-2	Semester

## The Master of Science in Environmental Science Consists of following 2 programme part(s):

## The Master of Science in Environmental Science is available in following medium of instruction/s:

1. English

Programme Part: Year-1 Separate Passing Head: No, Min: 0, Max: 1100, Total Credits: 44.00

Term: Semester I Separate Passing Head: No, Min Courses: 6, Max Courses: 6, Min:0, Max:550, Total

Credits: 22.00

The courses for Year-1 - Semester I are classified into following groups:

<b>1.Major Elective</b> (Min Courses: 1, Max Courses: 1, Separate Passing Head: No, Max. Marks: 100) Select minimum 1 course(s) Select maximum 1 course(s)		
Courses:		
	EVS506	Environmental Education, Policies & Legislation
	EVS507	Management of Water Resources
<b>2.Major Mandatory</b> (Min Courses: 4, Max Courses: 4, Separate Passing Head: No, Max. Marks: 350) Select minimum 4 course(s) Select maximum 4 course(s)		
Courses:		
	EVS501	Environmental Science and Environmental Biology
	EVS502	Natural Resources and Their Conservation
	EVS503	Biodiversity and Conservation
	EVS504	Lab Activities on EVS501, EVS502 & EVS503
<b>3.Research Methodology</b> (Min Courses: 1, Max Courses: 1, Separate Passing Head: No, Max. Marks: 100) Select minimum 1 course(s) Select maximum 1 course(s)		
Courses:		
	RES505	Research Methodology

Term: Semester II Separate Passing Head: No, Min Courses: 6, Max Courses: 6, Min:0,Max:550, Total

Credits: 22.00

The courses for Year-1 - Semester II are classified into following groups:

1.Major Elective (Min Courses: 1, Max Courses: 1, Separate Passing Head: No, Max. Marks: 100) Select minimum 1 course(s) Select maximum 1 course(s) Courses:				
EVS515	Environmental Sustainability			
EVS516	Solid & Hazardous Waste Management			
<b>2.Major Mandatory</b> (Min Courses: 4, Max Courses: 4, Separate Passing Head: No, Max. Marks: 350) Select minimum 4 course(s) Select maximum 4 course(s)				
EVS509	Environmental Chemistry			
EVS510	Environmental Geosciences & Computer Applications			
EVS511	Herbal Wealth			
EVS512	Lab Activities on EVS509 & EVS510			
<b>3.OJT &amp; FP Elective</b> (Min Courses: 1, Max Courses: 1, Separate Passing Head: No, Max. Marks: 100) Select minimum 1 course(s) Select maximum 1 course(s)				
Courses:				
EVS513	On Job Training			
EVS514	Field Project			

Programme Part: Year-2 Separate Passing Head: No, Min: 0, Max: 1100, Total Credits: 44.00

Term: Semester III Separate Passing Head: No, Min Courses: 6, Max Courses: 6, Min:0,Max:550, Total

Credits: 22.00

The courses for Year-2 - Semester III are classified into following groups:

<b>1.Major Elective</b> (Min Courses: 1, Max Courses: 1, Separate Passing Head: No. Max. Marks: 100)					
Select mi	Select minimum 1 course(s)				
Select ma	Select maximum 1 course(s)				
Courses:					
	EVS606	Sustainable management of Biodiversity			
	EVS607	Environmental Management			
	EVS608	Renewable Energy Studies			
<b>2.Major Mandatory</b> (Min Courses: 4, Max Courses: 4, Separate Passing Head: No, Max. Marks: 350) Select minimum 4 course(s) Select maximum 4 course(s)					
Courses:					
	EVS601	Environmental Monitoring and Energy Studies			
	EVS602	Instrumentation & Lab Techniques			
	EVS603	Green Chemistry			
	EVS604	Lab Activities on EVS601 & EVS602			
<b>3.Research Project</b> (Min Courses: 1, Max Courses: 1, Separate Passing Head: No, Max. Marks: 100) Select minimum 1 course(s) Select maximum 1 course(s)					
Courses:					
	EVS605	Research Project			

**Term: Semester IV** Separate Passing Head: No, Min Courses: 5, Max Courses: 5, Min:0,Max:550, Total Credits: 22.00

The courses for Year-2 - Semester IV are classified into following groups:

<b>1.Major Elective</b> (Min Courses: 1, Max Courses: 1, Separate Passing Head: No, Max. Marks: 100) Select minimum 1 course(s) Select maximum 1 course(s)				
Courses:				
	EVS613	Statistical Approaches & Modeling in Environmental Sciences		
	EVS614	Disaster Management		
	EVS615	Medicinal Plants and their Applications		
<b>2.Major Mandatory</b> (Min Courses: 3, Max Courses: 3, Separate Passing Head: No, Max. Marks: 300) Select minimum 3 course(s) Select maximum 3 course(s)				
Courses:				
	EVS609	Environmental Microbiology and Toxicology		
	EVS610	Environmental Issues & Human Health		
	EVS611	Lab Activities on EVS609 & EVS610		
<b>3.Reserch Project</b> (Min Courses: 1, Max Courses: 1, Separate Passing Head: No, Max. Marks: 150) Select minimum 1 course(s) Select maximum 1 course(s)				
Courses:				
	EVS612	Research Project		