

## **B.Sc. ENVIRONMENT & WATER MANAGEMENT**

### **PROGRAM OUTCOMES**

#### **After completion of Program the students will :**

- Have deep Knowledge on Air ,water, Noise, Solid waste ,other wastes pollution with their control and management solutions.
- Develop deeper understanding in environmental laws and environment Impact assessment and Environment Audit .
- Understand the concept and increase the consciousness about Green Marketing and Green Products
- Acquire knowledge on environment society ,sustainable development , disaster management and Industrial safety
- Acquire deep knowledge on Environmental statistics
- Have the ability to choose methods appropriate to research aims and objectives .
- develop the ability to identify and differentiate between renewable and non-renewable resources.
- Acquire awareness of Environmental organization , climate change , pollution control technologies.
- Understand the principles and the practical approaches and techniques required to effectively monitor the chemical elements of water quality.
- Acquire awareness on tourism within broader cultural, environmental, political and economic dimensions of society.
- Develop the basic understanding of the ecosystem and its structural and functional aspects.

### **PROGRAM SPECIFIC OUTCOMES**

#### **After completion of each program the student will:**

- Develop technical skills to use statistical tools and software in environmental data analysis
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- Be able to determine pollution using environmental analytical techniques in laboratory.
- Understand solid waste and hazardous waste management, beginning from source generation to waste disposal in a system of municipality organizational structure.
- concepts in Hydraulics , Hydrology waste wastewater and aw waste treatment methods.
- Will develop basic concepts of solid waste and hazardous waste management, beginning from source generation to waste disposal in a system of municipality organizational structure.
- recognize and advocate for civic engagement and inclusive practices for applying sustainability principles to local issues
- Develop the means to indicate how sustainability issues are impacting their immediate social, economic, and political environment.
- Analyze the effects on a global scale, such as ozone hole & global warming.
- Understand major geological processes occurring in the near surface of the Earth.



- Develop a sense to serve the environment as a resource, through service, outreach and engagement.
- To understand the fundamentals and basic concepts of Climate change science.
- Be able to demonstrate the ability to apply the scientific method and critical thinking in measuring and analysing the losses and know the water abstraction from the rainfall
- Acquire knowledge to select the most appropriate types of membrane processes for tertiary treatment of wastewater.

## **COURSE OUTCOMES**

### **After completion of the course the student will:**

- Develop scientific attitude to abate environmental Pollution.
- Gain a preliminary understanding of approaches to Disaster Risk Reduction (DRR).
- Acquire awareness of institutional processes in the country for Disaster Management.
- Explore the interconnectedness among all the biotic and abiotic components of the environment and the dynamic nature of the ecological processes in maintaining equilibrium in nature.
- Be able to examine the relationship between the environment and society and enabling them to understand and appreciate the role played by environment, society, and, their interface in shaping environmental decisions
- Be able to contextualize tourism within broader cultural, environmental, political and economic dimensions of society.
- Gain working knowledge of laboratory Procedures and sampling strategies required to ensure adequate water quality to ensure public health.
- Understand the principles and the practical approaches and techniques required to effectively monitor the chemical elements of water quality.
- Understand measurement of discharge in open & closed channels
- Know about the environmental impacts of different waste, and learn different measures proposed for their disposal and management.
- Have a grounded understanding of sustainability and how systems are interrelated
- Understand the fundamentals of hydrology, hydrological cycle and water runoff
- Gain knowledge of transfer & dispersion of air pollutants.
- Be able to introduce themselves to the concept of green technology, its goals and advantages
- Be able to witness the actual water treatment process in a water treatment plant to gain practical understanding of the course.
- Be able to equip them with the concepts of Groundwater which would help them to make better decisions in groundwater uses and management.
- Develop knowledge on how environmental geological processes impact humans and society
- Develop knowledge on environmental conventions and ethical reflection regarding environmental problems in local, regional, national, and global communities

- Know the role of the environment in the current practice of agriculture and concerns of sustainability, especially in the context of climate change and emerging global issues.
- Develop understanding regarding various legislation on environmental law
- Be able to illustrate and examine economic principles concerning the choice of instruments for controlling pollution and the relative strength and weaknesses of environmental policies based on command-and-control vis-à-vis market-based instruments.
- know the advanced technologies in Wastewater treatment
- Be able to assess or identify their readiness/ability/aptitude for entrepreneurship
- Examine the positive and negative tree-crops-soil interactions (for light, water and nutrients)
- Develop technical skills to use statistical tools and software in environmental data analysis.

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