Environmental Sciences Internship

Focussed Research Areas for Internship Students:

Air

1. Air Quality Monitoring:

Establish monitoring stations to assess pollution levels, measuring particulate matter (PM2.5), nitrogen dioxide (NO2), sulfur dioxide (SO2), and volatile organic compounds (VOCs) concentrations in urban and rural areas, aiding in understanding health impacts and environmental monitoring.

2. Impact of Climate Change on Air Quality:

Investigate the link between greenhouse gas emissions, temperature rise, and air quality changes like ozone levels, contributing to understanding climate impacts on air pollution patterns.

3. Pollution Reduction Technologies:

Designing and testing advanced filters and scrubbers for industries and vehicles.

Creating innovative solutions for reducing emissions from factories and power plants.

4. Green Energy Solutions:

Researching and implementing renewable energy sources to replace fossil fuels.

Studying the impact of renewable energy adoption on air quality improvement.

5. Urban Planning and Policy:

Analyzing the effectiveness of urban planning strategies in reducing air pollution.

Evaluating policies like congestion charges, emission standards, and vehicle restrictions.

6. Health Impact Studies:

Investigating the health effects of different pollutants on vulnerable populations.

Conducting epidemiological studies to understand long-term exposure effects.

7. Climate Change Mitigation:

Assessing how air pollution contributes to climate change.

Developing strategies to mitigate both air pollution and its impact on climate.

8. Community Engagement and Education:

Engaging communities in citizen science projects to monitor air quality.

Educating the public about the sources and effects of air pollution.

9. Nature-Based Solutions:

Exploring the role of green infrastructure (like urban forests, green roofs) in mitigating air pollution.

Investigating the impact of vegetation on air quality improvement.

10. Satellite Monitoring and Data Analysis:

Using satellite data to track global air pollution patterns.

Analyzing big data to understand trends and predict future air quality changes.

11. Cross-Disciplinary Research:

Collaborating across disciplines like chemistry, biology, engineering, and sociology to tackle air pollution comprehensively.

Water

1. Water Quality Testing:

Conduct comprehensive water tests covering pH, microbial contamination, heavy metals, and organic pollutants in freshwater sources, addressing concerns about waterborne diseases and purification methods.

2. Water Quality Monitoring:

Development of advanced sensors for real-time water quality assessment.

Implementing monitoring networks in rivers, lakes, and oceans to track pollution sources.

3. Wastewater Treatment and Management:

Researching and implementing innovative wastewater treatment technologies.

Studying the impact of agricultural, industrial, and urban wastewater on water bodies.

4. Ecosystem Restoration:

Projects aimed at restoring and preserving wetlands, mangroves, and aquatic habitats.

Implementing green infrastructure for natural water filtration and purification.

5. Pollution Source Identification:

Using forensic techniques to identify sources of pollution in water bodies.

Studying the transport and fate of pollutants in aquatic systems.

6. Microplastics and Emerging Contaminants:

Research on the impact of microplastics, pharmaceuticals, and other emerging pollutants on aquatic ecosystems.

Developing strategies to mitigate their effects and prevent further contamination.

7. Community-Based Water Conservation:

Engaging communities in water conservation practices and awareness campaigns.

Empowering local initiatives for sustainable water resource management.

8. Policy and Regulation:

Analyzing the effectiveness of water quality regulations and policies.

Advocating for stronger environmental regulations to reduce pollution.

9. Climate Change and Water Pollution:

Investigating the link between climate change and water quality degradation.

Understanding how changing weather patterns impact water pollution dynamics.

10. Remote Sensing and Data Analysis:

Utilizing satellite imagery and remote sensing for water quality monitoring.

Analyzing big data to model and predict water pollution trends.

11. Impact of Industrial Runoff on Water Bodies

Explore the repercussions of industrial activities on nearby water sources, analyzing heavy metal content, chemical pollutants, and examining strategies for runoff control and ecological impact mitigation.

12. Soil Erosion Prevention Techniques:

Research erosion-prevention methods such as terracing, reforestation, and erosion-resistant crops to conserve soil fertility and prevent sediment runoff.

13. Soil Contamination Analysis:

Investigate the effects of pollutants (pesticides, heavy metals) on soil quality, assessing bioaccumulation and remediation strategies for contaminated sites.

Other Environmental Issues:

14. Renewable Energy Feasibility Studies

Evaluate the feasibility and efficiency of renewable energy sources (solar, wind, hydro)

considering energy sustainability and transition to green technologies.

15. Urban Ecology and Biodiversity

Study how urban development impacts biodiversity, focusing on habitat fragmentation, urban wildlife, and strategies to preserve green spaces for species richness.

16. Sustainable Agriculture Practices:

Research sustainable farming techniques like organic farming, crop rotation, and soil conservation to minimize environmental impact while maintaining agricultural productivity.

17. Environmental Policy Assessment and Development:

Analyze existing environmental policies, assess governance mechanisms, and propose improved regulations and implementations for effective environmental conservation and management.

Fee Structure

Note 1: Fee mentioned below is per candidate.
Note 2: Fee of any sort is NON REFUNDABLE once paid. Please cross confirm all the details before proceeding to fee payment

2 Days Total Fee: Rs 6261/-
Reg Fee Rs 1878/-
5 Days Total Fee: Rs 15652/-
Reg Fee Rs 4696/-
10 Days Total Fee: Rs 24000/-
Reg Fee Rs 5500/-
15 Days Total Fee: Rs 37895/-
Reg Fee Rs 5500/-
20 Days Total Fee: Rs 56000/-

Reg Fee Rs 5500/-

30 Days Total Fee: Rs 88941/-

Reg Fee Rs 5500/-

45 Days Total Fee: Rs 135529/-

Reg Fee Rs 5500/-

2 Months Total Fee: Rs 168000/-

Reg Fee Rs 5500/-

3 Months Total Fee: Rs 256000/-

Reg Fee Rs 5500/-

4 Months Total Fee: Rs 340000/-

Reg Fee Rs 5500/-

5 Months Total Fee: Rs 428000/-

Reg Fee Rs 5500/-

6 Months Total Fee: Rs 512000/-

Reg Fee Rs 5500/-

7 Months Total Fee: Rs 600000/-

Reg Fee Rs 5500/-

8 Months Total Fee: Rs 684000/-

Reg Fee Rs 5500/-

9 Months Total Fee: Rs 768000/-

Reg Fee Rs 5500/-

10 Months Total Fee: Rs 856000/-

Reg Fee Rs 5500/-

11 Months Total Fee: Rs 940000/-
Reg Fee Rs 5500/-

1 Year Total Fee: Rs 1028000/-
Reg Fee Rs 5500/-

Please contact +91-9014935156 for fee payments info or EMI options or Payment via Credit Card or Payment using PDC (Post Dated Cheque).