SCHOOL OF EARTH SCIENCES
M. Sc. Environmental Sciences

Program Objectives

1. To create and disseminate knowledge to the students about environmental problems at local, regional and global scale.
2. To provide practical training on modern instrumentation and analytical techniques for environmental analyses.
3. To sensitize students towards environmental concerns, issues, and impacts of climate change and related mitigation strategies.
4. To make the students to apply their knowledge for efficient environmental decision-making, management and sustainable development.
5. To prepare students for successful career in environmental departments, research institutes, industries, consultancy and NGOs, etc.

Program Outcomes

After completion of the program, the students have:

1. Acquired fundamental knowledge of different aspects of environment and local, regional and global environmental problems.
2. Developed environmental monitoring skills, including conduct of experiments and data analysis.
3. Obtained exposure to the environmental pollution control technologies.
4. Acquired the knowledge and skills needed for the environmental design and management.
5. Acquired skills in the preparation, planning and implementation of environmental projects.
6. The students passing M.Sc. Degree in the subject Environmental Science and other relevant subjects have the opportunity of job and services in the field of Teaching, Researches, Projects, Effluent Treatment Plants of various Industries/Companies/Factories, Municipal Councils/Corporations, Central Pollution Control Board, State Pollution Control Boards, National Research Institutes/Organizations/Laboratories, NEERI, EIA, GIS, Environmental Monitoring Projects, Environmental Consultants, Different Laboratories, NGO's, Forest department, Water Purification and Treatment Plants and Various Sectors related to the field of Environment.

PROGRAM SPECIFIC OUTCOMES

1. Understand the basic concepts of Environments and its components along with their interactions through study of Ecology, Biodiversity, Environmental Chemistry, and Environmental Microbiology

2. Understand the different kinds of Pollutions and their sources through study of Climate and Air Pollution Studies, Hazardous Waste & Environmental Toxicology and Soil Pollution and different laws about pollution

3. Analyse and determine pollution using Environmental Analytical Techniques, Biostatistics and Computational Techniques.

4. Understand different technologies like biotechnology, water and Wastewater treatment technology to find the solutions and their applications in abatement of Pollution and other environmental problems.

5. Use of different tools for the management of Environment, Energy resources, solid wastes, Biodiversity conservation like Remote Sensing & Geographical Information Systems and different methodologies.

6. Understand the disaster management and industrial safety.

7. Determine the environmental impact due to different developmental projects and find solution to eliminate these impacts.

8. Through Dissertation, student can identify a particular environmental problem, review the literature for finding the gaps, develop research methodology, collect data and carry out data analysis and interpretation for finding a suitable solution and acquire the ability to write the research findings in the form of structured thesis and communicate the research results through oral or poster presentations.