

### Program Educational Objectives (PEOs)

The **M. Sc. Environmental Sciences** program describe accomplishments that graduates are expected to attain within five to seven years after graduation

<b>PEO1</b>	The students could get employment opportunities in Central Pollution Control Board (CPCB) and State Pollution Control Board (SPCB), Research Institutions, Colleges, Universities and Non-governmental organizations.
<b>PEO2</b>	After successful completion of the course, the students could get job opportunities in urban and rural environmental mitigation and awareness including social forestry programs, bio-fertilizer and bio-pesticide industries, waste management and organic farming divisions funded by National, International and Regional agencies.
<b>PEO3</b>	The students could get employment perspectives in R & D laboratories of waste water treatment plants, metal, chemical and textile effluent treatment plants, municipal solid waste management units and waste management in biomedical industries and hospitals.
<b>PEO4</b>	The students could find employment opportunities in agro industries, forest departments, water harvesting and watershed management sectors, bio-resource utilization and biodiversity conservation organizations, food and feed Industries, environment friendly and integrated livestock management sectors.
<b>PEO5</b>	Students also having the immense opportunities to pursue higher studies in various research fields such as environmental pollution, environmental chemistry, waste management and bioremediation, environmental microbiology, waste water treatment, recycle, reuse and management, sustainable environmental food security, bio-resource utilization and biodiversity conservation, functional and ecosystem ecology, environmental toxicology, agro-waste ecosystem, non-biodegradable synthetic chemicals and polymers in environment, occupational health and industrial safety, environment analytical techniques, environmental impact assessment, remote sensing and geographical information system, environmental biotechnology, carbon sequestration, natural disaster management and mitigation, climate change, marine pollution and resources utilization, restoration of different ecosystems, renewable and green energy and environmental law, policies and auditing.

<b>PROGRAMME SPECIFIC OUTCOMES (PSOs)</b>	
<b>CERTIFICATE IN FUNDAMENTALS OF ENVIRONMENTAL SCIENCES</b>	
<b>FIRST YEAR</b>	<p>The aim is to build conceptual understanding of students by exposing them to the basic principles behind various environmental processes.</p> <p>To introduce students to the basic concepts of ecology its different branches, scope and ecosystem dynamics along with the various ecosystem functions. They also be able to understand the good laboratory practices, meteorological parameters and to know the strategies for sustainable management and carrying capacity. Educate the students on source, classification, and impact of air, water and soil pollution. The students will also recognize the various control measures of pollution problems. Understand the solid waste pollution, noise pollution, radioactive and thermal pollution and related consequences</p>
<b>DIPLOMA IN ENVIRONMENTAL SCIENCES</b>	
<b>SECOND YEAR</b>	<p>To enrich the knowledge on biodiversity its value and various approach for conservations. Make students aware of biodiversity of India, biogeographic zones and role of local communities and traditional knowledge in conservation.</p> <p>To develop the understanding on natural resources and their significance and to know the strategies for sustainable management. Understand the basic principles and application of remote sensing and GIS techniques.</p> <p>Understand the basic laws, act, treaty, public policies and PIL. Environment provisions in constitution, power and functions of government agencies for pollution control. In addition also get the knowledge of sustainable management of wastes.</p> <p>The objective of the course is to provide a comprehensive and historical overview of hazardous waste management, drawing from both scientific and engineering principles, and prepare our students to be well-qualified and competitive in the responsibility of engineering design and permitting in the field of hazardous waste management.</p>
<b>DEGREE IN BACHELOR OF SCIENCE</b>	
<b>THIRD YEAR</b>	<p>Impart knowledge on microbial diversity and recent advancement methods in the analysis of microbial diversity. Provide in-depth knowledge of role of beneficial and pathogenic microorganisms in environment.</p> <p>Understand the application of microbes for production of different eco-friendly products. Impart knowledge in molecular biotechnology and its applications in Environmental management and conservation. Make students aware about Bioethics, biosafety and IPR.</p> <p>To introduce students to the general environmental awareness, current environmental priorities in India and basic of statistics and instrumentations.</p>