ENV374 Air Pollution Control

Department of Environmental Science and Engineering - Compulsory Course

Credit: 3 ECTS:5

Course Description: Air pollution control and other important environmental issues are thoroughly covered in the course "Air Pollution Control" (ENV374). By exploring the principles of air pollution and its effects on human health, ecosystems, and social welfare, the course tackles many UN Sustainable Development Goals (SDGs). It specifically supports SDG 3 (Good Health and Well-Being) by examining how air pollution affects people's health. Furthermore, it supports SDG 13 (Climate Action) by giving students the skills and information necessary to control air pollution, a major contributor to climate change. The course also addresses economic issues by connecting SDGs 8 (Decent Work and Economic Growth) and 12 (Responsible Consumption and Production). In general, "Air Pollution Control" gives pupils a comprehensive grasp of air quality.

Course Outcomes:

- This course empowers students with the knowledge and skills to effectively manage air pollution and contribute to solutions for this pressing environmental challenge.
- Through exploring economic aspects of air pollution, students will gain insights into the costs and benefits associated with pollution control measures, promoting informed decision-making.
- Students will be able to articulate the concepts of climate change and global warming and understand their interconnectedness with air pollution, emphasizing the importance of pollution control in addressing climate-related issues.
- By becoming familiar with air pollution's health and social consequences, students will be equipped to evaluate its impacts on individuals, communities, and broader societal well-being.
- This course will equip students with effective strategies and techniques for managing and controlling air pollution, enabling them to implement measures that contribute to improved air quality.
- Students will apply meteorological principles to comprehend how atmospheric conditions influence the dispersion and transport of pollutants, enhancing their ability to assess and predict air quality.
- Through an integrated approach, students will recognize the interconnectedness of environmental, health, and economic factors in designing effective pollution control strategies promoting holistic solutions to air quality challenges.
- Students will gain an understanding of how air pollution control efforts contribute to achieving various UN Sustainable Development Goals, including promoting good health and well-being, fostering economic growth, encouraging responsible consumption and production, and advancing climate action.