042-CMC-06-02 ENVIRONMENTAL ENERGY AND AUDIT

Significance of the Program

Given the increasing global emphasis on sustainability, environmental conservation, and energy efficiency this program equips students with specialized knowledge in environmental science, energy management, and audit practices, providing them with a deep understanding of the interplay between environmental factors and energy systems.

Career Options

Students may find opportunities in

- Environmental consulting firms,
- Energy audit companies,
- Government agencies,
- Research institutions, and
- Industries focusing on sustainability.

Program Objectives

- Provide students with advanced knowledge and skills in the areas of environmental science, energy management, and audit practices.
- Foster an understanding of complex environmental systems and the impact of human activities on the environment.
- Equip students with expertise in energy audit and management, enabling them to identify and implement energy-efficiency measures.
- Familiarize students with various renewable energy technologies and their applications, encouraging the integration of sustainable energy sources.
- Encourage the adoption of sustainable practices in industries, businesses, and communities through the application of environmental-friendly technologies and methodologies.
- Cultivate research skills and an innovative mindset, allowing students to contribute to the development of new technologies and solutions in the field.

Outcomes of the Program

- Enables them to demonstrate a comprehensive understanding of advanced concepts in environmental science, energy management, and audit practices.

- Enables them to conduct detailed energy audits for various types of facilities and systems, identifying opportunities for energy conservation and efficiency improvement.
- Enables them to evaluate the environmental impact of projects using appropriate assessment tools, considering factors such as air quality, water quality, and biodiversity.
- Enables them to communicate complex environmental and energy-related information effectively through written reports, oral presentations, and visualizations to diverse audiences.

Major Course Outline

1. Environmental Management and Sustainability
2. Energy Audit and Management
3. Renewable Energy Technologies
4. Environmental Impact Assessment
5. Climate Change and Adaptation
6. Energy Policy and Regulation
7. Environmental Law and Policy
8. Waste Management and Recycling
9. Air Pollution Control Technologies
10. Environmental Systems Modelling