SEDV 621: ENVIRONMENTAL MANAGEMENT TOOLS IN THE ENERGY SECTOR

Environmental management systems and issues are discussed as they relate to organizational and environmental impacts. Topics include: environmental management, strategic planning and policies; sustainable development and the organization, innovation, life cycle assessment; and management processes including audits, development of indicators and reporting, green product development, risk management; environmental accounting; and economic instruments.

Instructor:
TBD

Course Objective:
The purpose of this course is to gain an understanding of how strategy is implemented through environmental management systems. The course explores tools and methods that can be used by managers within businesses to achieve environmental goals while maintaining the economic viability of the company and ensuring that stakeholder interests are given appropriate consideration in decision making. Strategy implementation can range from compliance of laws and regulations to leadership in environmental innovation.

This integrative course takes the perspective of the manager within the company that has responsibility for ensuring that environmental goals are met. The manager’s duties include the setting of goals and objectives and the organizing and directing of people, finances, materials, information, and other sources to attain those goals and feedback to assess progress. The course will focus on businesses that are involved in energy production, generation or distribution, manufacturing of energy products or provision of energy services.

On successful completion of this course, students will be able to:

- Understand the basic principles of business and management with emphasis on environmental management;
- Identify the components that make up an environment management system and discuss examples of these that exist internationally.
- Distinguish between the implementation of operational, tactical and strategic decisions within an organisation and how they can be used to help attain environmental goals.
- Comprehend how to implement environmental management systems that motivate compliance and stimulate innovation in both products and services.
- Critically evaluate environmental policies and management of those policies;
- Analyse case studies that present challenges to companies in terms of environmental management and suggest methods for improvement.

Topics Covered (Selected):
- Environmental management systems (EMS)
- Sustainable development and social impacts of organizations
- Organizational processes related to environmental issues and outcomes
- Green product and process development
- Product and technology assessment
- Environmental policies and strategies
- Innovation

MSc in Sustainable Energy Development