

VALUE ADDED COURSE
IN
SUSTAINABLE DEVELOPMENT

Course Objectives:

30 hrs.

- (i) Understanding the various factors responsible for environmental pollution.
- (ii) Role of Green Chemistry in mitigating the environment pollution

Module 1: Global warming, green house effect, global ozone problem, acid rain, global CO₂ rise and impact on biosphere. **(6 hours)**

Module 2: Vehicular pollution, Radiation hazards, Energy management, Toxicology and Natural disasters. **(6 hours)**

Module 3: Health and Environment, World health report, Immunology and Human diseases, Allergies due to Environmental impacts. **(6 hours)**

Module 4: Introduction of Green Chemistry, Concept of Green Chemistry, Twelve principles of Green Chemistry. **(6 hours)**

Module 5: Major applications of Green Chemistry for examples like: Preparation of Esters, Synthesis of Biodiesel, Synthesis of Acetanilide. **(6 hours)**

Course learning outcomes:

After the completion of the course, the student should be able to:

1. To understand the various factors that causes environmental pollution.
2. Applications of green Chemistry and its advantages.
3. Put students in advantageous position to work in modern industry.