

<b>INSTITUTE</b>	<b>DIPLOMA STUDIES</b>
<b>PROGRAM</b>	<b>DIPLOMA ENGINEERING (COMPUTER ENGINEERING)</b>
<b>SEMESTER</b>	<b>2</b>
<b>COURSE TITLE</b>	<b>ENVIRONMENT CONSERVATION &amp; DISASTER MANAGEMENT</b>
<b>COURSE CODE</b>	<b>09AU0102</b>
<b>COURSE CREDITS</b>	<b>0</b>

**Objective:**

- Objectives of introducing this subject at first year level in all the branches are:
  - To sensitize the students to environmental concerns and their impact on society and business
  - To familiarize the students with strategies for addressing environmental issues
  - Be better prepared to recover from a major natural catastrophe

**Course Outcomes:** After completion of this course, student will be able to:

- Understand the ecosystem and its terminology and solve various engineering problems by applying ecosystem knowledge to produce eco-friendly products
- Understand the various types of pollutions and their remedial measures
- Understand different renewable energy resources and their applications
- Understand the role of an engineer concerning climate change and disaster management

**Pre-requisite of course:**BASIC LIFE SCIENCE

**Teaching and Examination Scheme**

<b>Theory Hours</b>	<b>Tutorial Hours</b>	<b>Practical Hours</b>	<b>ESE</b>	<b>IA</b>	<b>CSE</b>	<b>Viva</b>	<b>Term Work</b>
2	0	0	0	0	0	0	0

<b>Contents : Unit</b>	<b>Topics</b>	<b>Contact Hours</b>
1	<b>Introduction of Environmental Science</b> Definition of environment, ecosystem, food chain, and food web, the necessity of environmental science, Importance of environment and scope	4
2	<b>Types of pollution with their causes, effects and remedial measures</b> Air pollution, water pollution, noise pollution, and soil pollution, Global environment problems with their causes, effects & remedies: climate change	8

<b>Contents : Unit</b>	<b>Topics</b>	<b>Contact Hours</b>
3	<b>Renewable Sources of Energy</b> Solar energy: basics of solar energy and its importance, Wind energy: need, limitations and future scope, Recent trends of renewable sources of energy	6
4	<b>Disaster Management</b> Concepts and definition of disaster, Disaster management cycle, role of an engineer in disaster management Rescue techniques during a disaster, Natural disasters: earthquake, cyclone, flood, tsunami, drought, and landslides, Manmade disaster: fire, civil war, technological disasters	10
<b>Total Hours</b>		<b>28</b>

**Textbook :**

- 1 Environment Engineering and Disaster Management, Sanjay K., Laxmi Publications, 2018

**References:**

- 1 Environmental Science, Environmental Science, Y. K. Singh, New Age International (P) Ltd., 2006

**Suggested Theory Distribution:**

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation					
<b>Remember / Knowledge</b>	<b>Understand</b>	<b>Apply</b>	<b>Analyze</b>	<b>Evaluate</b>	<b>Higher order Thinking</b>
30.00	40.00	30.00			

**Instructional Method:**

- 1 The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.
- 2 The internal evaluation will be done on the basis of continuous evaluation of students in the class-room.
- 3 Department level examination will be conducted at the end of semester for evaluation of performance of students.
- 4 Students will use supplementary resources such as online videos, videos, e- courses etc.

**Supplementary Resources:**

- 1 <https://www.eco-prayer.org/>
- 2 <https://www.teriin.org/>

**Supplementary Resources:**

- 3 <https://cpcb.nic.in/>
- 4 <https://www.isro.gov.in/>
- 5 <https://ndma.gov.in/en/>
- 6 <http://www.indiaenvironmentportal.org.in/>