

**COURSE CODE:** ENS-422  
**COURSE NAME:** Pollution Control Technologies  
**CREDIT HOURS:** Theory = 3 Practical = 0 Total = 3  
**CONTACT HOURS:** Theory = 48 Practical = 0 Total = 48  
**PREREQUISITE:** None  
**MODE OF TEACHING:** Three hours of lecture per week

**COURSE DESCRIPTION:**

The objective of this course is to acquaint the students with the technological approaches used for controlling pollution. The students will become familiar with different technologies and modern techniques for their control and abatement.

**TOPICS COVERED:**

<b>Week#</b>	<b>Topics</b>
1	Collection, treatment and distribution of drinking water supply
2	Collection, treatment and distribution of drinking water supply
3	Collection, treatment and disposal of municipal and industrial wastewater
4	Collection, treatment and disposal of municipal and industrial wastewater
5	Low-cost water treatment and sanitation techniques
6	Low-cost water treatment and sanitation techniques
7	Solid and hazardous waste management
8	Solid and hazardous waste management
9	<b>Midterm Exam – MSE</b>
10	Cleaner production techniques
11	Cleaner production techniques
12	Waste hierarchy (Reduce, re-use and recycling)
13	Waste site investigation and remediation
14	Waste site investigation and remediation
15	Air pollution control

16	Air pollution control
17	Noise pollution control
18	<b>End Semester Exam</b>

**Text and Material:**

1. Solid Waste Technology and Management, T. Christensen, John Wiley & Sons, 2011.
2. Wastewater Treatment Technologies: Design Considerations by Mritunjay Chaubey, Wiley-Blackwell, 2021.
3. Handbook of Air Pollution Prevention and Control, by Shrinivash Rao, 2016.
4. Air Pollution Control Technology Handbook, K.B. Schnelle and C.A. Brown, CRC Press, 2<sup>nd</sup> edition, 2016.

**ASSESSMENT SYSTEM:**

<b>Theoretical/Instruction</b>	<b>100%</b>
Assignments	10%
Quizzes	15%
Mid Semester Exam	25%
End Semester Exam	50%
<b>Practical Work</b>	<b>0%</b>
Lab Attendance	0%
Lab Report	0%
Lab Quiz	0%
Lab Rubrics	0%