

Name of Faculty	:	Faculty of Science
Name of Program	:	Master of Science
Course Code	:	1MSF04
Course Title	:	Industrial Risk Hazard Management
Type of Course	:	Professional Core
Year of Introduction	:	2023-24

Prerequisite	:	Zeal to learn the subject
Course Objective	:	To prevent death and personal injury by identifying and evaluating potential hazards and risks associated with a particular activity, process, or environment.
Course Outcomes	:	At the end of this course, students will be able to:
	CO1	Apply Risk Control System Using Risk Matrix
	CO2	Analysis of hazards reporting system
	CO3	Understand the occupational health, safety and hygiene.
	CO4	Understand the people efficiency in their working environment

Teaching and Examination Scheme

Teaching Scheme (Contact Hours)			Credits	Examination Marks				
L	T	P		Theory Marks		Practical Marks		Total Marks
			C	SEE	CIA	SEE	CIA	
5	0	0	5	70	30	-	-	100

Legends: **L**-Lecture; **T**-Tutorial/Teacher Guided Theory Practice; **P** – Practical, **C** – Credit, **SEE** – Semester End Examination, **CIA** - Continuous Internal Assessment (It consists of Assignments/Seminars/Presentations/MCQ Tests, etc.)

Course Content

Unit No.	Topics	Teaching Hours	Weightage	Mapping With COs
1	Industrial Risk Management Hazard Assessment and Risk Control System Using Risk Matrix.	15	25%	CO1
2	Hazard Reporting System. Job Hazard Analysis: Working Examples Of Chemical Industries, Refineries & Petrochemical Industries.	15	25%	CO2

3	Occupational Health & Diseases, and Hygiene, Site Safety Survey	15	25%	CO3
4	A) Ergonomics and Job Design, Accident and Incident. B) Investigation, Reporting, Analysis And Record Keeping	15	25%	CO4

Suggested Distribution of Theory Marks Using Bloom's Taxonomy						
Level	Remembrance	Understanding	Application	Analyse	Evaluate	Create
Weightage	-	50	25	25	-	-

NOTE: This specification table shall be treated as a general guideline for the students and the teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Suggested Learning Websites

Sr. No.	Name of Website
1	https://archive.nptel.ac.in/courses/105/102/105102176/

Reference Books

Sr. No.	Name of Reference Books
1	AIChE/CCPS, Guidelines for Hazard Evaluation Procedures second edition. Centre for Chemical Process Safety, American Institute of Chemical Engineers, New York,1992.
2	AIChE/CCPS, Guide lines for Chemical Process Quantitative Risk Analysis second edition. Centre for Chemical Process Safety, American Institute of Chemical Engineers, New York, 2000.
3	Lees F. P. Loss Prevention in the Process Industries second edition. Butterworth's, London,1996