



**Integral University, Lucknow**  
**Attributes &SDGs Common for all**  
**branches/Disciplines**

Course Code	Course Title	Attributes							SDGs No.
ES203	Disaster Management and Mitigation	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	SDGs 3,11 & 17
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**B.Tech. (All Branches)**

**Effective from Session:**

Course Code	ES203	Title of the Course	Disaster Management and Mitigation	L	T	P	C
Year	II	Semester	IV	2	1	0	3
Pre-Requisite	NIL	Co-requisite	NIL				
Course Objectives	1. <b>Understand</b> the various types of disasters and analyze their profiles in the Indian context. 2. <b>Explain</b> the causes and <b>evaluate</b> the impacts of different disasters through case studies of national and global events. 3. <b>Apply</b> risk reduction approaches in disaster management and <b>analyze</b> safety measures for mitigating industrial disasters. 4. <b>Comprehend</b> the fundamental concepts of the Disaster Management Cycle and <b>implement</b> appropriate risk reduction strategies. 5. <b>Examine</b> national disaster mitigation acts and policies, and <b>assess</b> the roles of key stakeholders such as the Army, Police, Community, Corporate sector, and Media in post-disaster management from both national and global perspectives.						
Course Outcomes							
CO1	Students will be able to learn types of disasters and its profile in India						
CO2	Students will be able to understand the causes and impacts of disasters on environment						
CO3	Students will be able to learn about risk reduction approaches of disasters with safety issues in mitigating industrial disasters.						
CO4	To understand the concept of Disaster Management Cycle and its Risk Reduction						
CO5	Students will be able to learn the role of Acts, Policies, National and International Organizations in Disaster Management						
CO6	Students will be able to learn about Global Perspectives of Disasters						

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	Introduction to disaster	Introduction to Disasters, Concepts, Definition and types (Natural and Man-made), Disaster profile of India.	6	CO1
2	Impact of Disaster	Repercussions of Disasters and Hazards: Economic Damage, Loss of Human and Animal Life, Destruction of Ecosystem., Case studies from Disasters, Large Hydro projects and its risks for Disasters.	8	CO2
3	Disaster Risk Reduction	Approaches to Disaster risk Reduction, Risk Assessments and Vulnerability Analysis Techniques, Safety issues in mitigating, Case studies, EHS	7	CO 3
4	Disaster Management	Disaster Management Cycle. Reconstruction and Rehabilitation. Early warning Systems Pre-Disaster Management, Post Disaster Management	6	CO4
5	Disaster Act and Policies	National Acts and policies for mitigating Disasters (Disaster Management Act 2005, NDRF, National Policy for Disaster Management 2009, Role of Army and Police Force in Disaster, Role of International/National Humanitarian aid/ Relief Organizations for Disaster management, Role of Community, Corporate, Media etc. for post Disaster Management.	9	CO5
6	Global Perspective (Natural and Manmade Disasters)	Case Studies of disasters induced by Human Activities and climate change such as earthquake, forest fire, flood, drought, landslides, Nuclear Reactor Meltdown, Industrial Accidents, Oil Slicks and Spills, Outbreaks of Disease and Epidemics, War and Conflicts.	9	CO 6

**Reference Books:**

- (1) Gupta Harsh K., Disaster Management, Hyderabad University Press, Publications-Meerut.
- (2) Sethi, V.K., Disaster Management, New Delhi Maxford Books
- (3) Bhattacharya, Tushar, Disaster Science and Management, New Delhi Tata Mc Graw Hill.
- (4) Nidhi Gauba, Dhawan/ Ambrina Sardar Khan, Disaster Management and Preparedness, CBS

**e-Learning Source:**

[https://www.youtube.com/watch?v=9Wlwljva\\_s](https://www.youtube.com/watch?v=9Wlwljva_s)

[https://www.youtube.com/watch?v=uA\\_OLKfQpYA](https://www.youtube.com/watch?v=uA_OLKfQpYA)

**Course Articulation Matrix: (Mapping of COs with POs and PSOs)**

PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	2	1	1	1	1	2	3	-	2	2	1	2	1	2	-	-	-	-
CO2	2	2	2	1	2	2	3	-	2	2	2	2	1	2	-	-	-	-
CO3	3	2	2	1	2	2	3	-	2	2	1	2	1	2	-	-	-	-
CO4	2	2	3	1	2	2	3	-	2	1	1	2	1	2	-	-	-	-
CO5	1	1	2	2	1	1	2	-	2	2	1	2	1	2	-	-	-	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

<b>Name &amp; Sign of Program Coordinator</b>	<b>Sign &amp; Seal of HoD</b>
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