



SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited by NAAC with "A" Grade – 3.32 CGPA, Recognized under 2(f) & 12(B) of UGC Act 1956, Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK, Kakinada Seetharampuram, W.G.DT., Narsapur-534280, (Andhra Pradesh)

DEPARTMENT OF CIVIL ENGINEERING TEACHING PLAN

Course Code	Course Title	Seme ster	Branches	Contact Periods /Week	Academic Year	Date of commencement of Semester
16CEX002	DISASTER MANAGEMENT	VIII	CSE	6	2019-20	25-11-2019
COURSE OUTCOMES: Students are able to						
1	identify the tools of integrating disaster management principles in disaster mitigation process.[K1]					
2	distinguish between the different approaches needed to manage pre and post- disaster activities.[K2]					
3	prepare the process of risk management and develop a basic understanding method for the role of public in risk management .[K2]					
4	prepare the 'relief system', 'disaster victim' and relate them.[K3]					
5	differentiate the planning strategies useful in risk mitigation processes.[K4]					
6	point out about public awareness and economic incentive possibilities.[K4]					
UNIT	Out Comes / Bloom's Level	Topics No.	Topics/Activity	Text Book / Reference	Cont act Hour	Delivery Method
I Natural Hazards and Disaster management	CO1: Identify the tools of integrating disaster management principles in disaster mitigation process. [K1]	1.1	Introduction to disaster management- Concepts of hazards and disaster	T2,R1, R3	1	Chalk & Talk
		1.2	Disaster management and its components	T2,R1, R3	1	Chalk & Talk
		1.3	Interdisciplinary nature of disaster management	T2,R1, R3	1	Chalk & Talk
		1.4	Disaster management cycle- Disaster, Response, Rehabilitation and recovery, Prevention and mitigation, & preparedness	T2,R1, R3	1	Chalk & Talk
		1.5	Five Priorities for action	T2,R1, R3	1	Chalk & Talk
		1.6	Flood risk management - Case study	T1, T2, R1	1	PPT & talk
		1.7	Drought risk management- Case study	T1, T2, R1	1	PPT & talk
		1.8	Earthquakes & landslides	T1, T2, R1	1	PPT &



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			risk management- Case study			talk
		1.9	Global warming risk-Case study	T1, T2, R1	1	PPT & talk
		1.10	Cyclone risk management- Mitigation and management- case study	T1, T2, R1	1	PPT & talk
		1.11	Tsunami risk management, Post Tsunami hazards along the Indian coast	T1, T2, R1	1	PPT & talk
Content beyond Syllabus		1.12	Nuclear powerplant accident-Case study	Weblink	1	PPT & talk
Total					12	
II Man Made Disaster and their management	CO 2: Distinguish between the different approaches needed to manage pre and post-disaster activities. [K2]	2.1	Fire hazards-Case study	T2, R3	1	PPT & talk
		2.2	Transport hazard dynamics	T2, R3	1	PPT & talk
		2.3	Solid waste management	T2, R3	1	PPT & talk
		2.4	Post disaster management-case study	T2, R3	1	PPT & talk
		2.5	Bio terrorism risk management-case study	T3,R3	1	PPT & talk
		2.6	Threat in mega cities-case study	T3,R3	1	PPT & talk
		2.7	Rail accidents- risk management-case study with examples	T3,R3	1	PPT & talk
		2.7	Air craft's accidents risk management-case study with examples	T3,R3	1	PPT & talk
		2.8	Emerging infectious diseases & Aids and their management	T3,R3	1	PPT & talk
Total					9	
		3.1	Building Codes and Land Use Planning: Challenges of Development and Enforcement	T1, T2,R3	1	PPT & talk
		3.2	Social Vulnerability: Who Draws the Line? Where	T1, T2,R3	1	Chalk & talk, PPT



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III Risk and Vulnerability	CO3: Explain the process of risk management. [K2]		and Why?			
		3.3	Environmental Vulnerability	T1, T2,R3	1	Chalk & talk, PPT
		3.4	Environmental drivers and impact of disasters	T1, T2,R3	1	Chalk & talk, PPT
		3.5	Macroeconomic Management	T1, T2,R3	1	Chalk & talk, PPT
		3.6	Sustainable Development	T1, T2,R3	1	Chalk & talk, PPT
		3.7	Disaster Risk Reduction	T1, T2,R3	1	Chalk & talk, PPT
		3.8	Climate Change Risk Reduction:	T1, T2,R3	1	Chalk & talk, PPT
		3.9	Decision-making in Uncertainty and framework	T1, T2,R3	1	Chalk & talk, PPT
		3.10	Financial Management of Disaster-related Economic Losses	T1, T2,R3	1	Chalk & talk, PPT
Total					10	
IV Role of Technology in Disaster managements	CO4: prepare the 'relief system', 'disaster victim' and relate them [K3].	4.1	Disaster management for infra structures	T1,R3	1	Chalk & talk, PPT
		4.2	Taxonomy of infrastructure	T1,R3	1	Chalk & talk, PPT
		4.3	Disaster Management for treatment plants and process facilities	T1,R3	1	Chalk & talk, PPT
		4.4	Disaster Management for electrical substations	T1,R3	1	Chalk & talk, PPT
		4.5	Disaster Management for roads	T1,R3	1	Chalk & talk, PPT
		4.6	Disaster Management for bridges	T1,R3	1	Chalk & talk, PPT
		4.7	Mitigation programme for earthquakes	T1,R3	1	Chalk & talk, PPT
		4.8	Flowchart for earthquake preparedness	T1,R3	1	Chalk & talk, PPT
		4.9	Geospatial information in agriculture drought assessment	T1,R3	1	Chalk & talk, PPT
		4.10	Multimedia technology in disaster risk management	T1,R3	1	Chalk & talk, PPT
		4.11	Training transformable indigenous knowledge in disaster reduction	T1,R3	1	Chalk & talk, PPT
		4.12	The Japanese experience	T1,R3	1	Chalk &



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			in disaster reduction			talk, PPT
Total					12	
V Education and Community Preparedness	CO5: Differentiate the planning strategies useful in risk mitigation processes. [K4]	5.1	Introduction to Education and community preparedness	T1, R3	1	Chalk & talk, PPT
		5.2	Education in Disaster Risk Reduction	T1, R3	1	Chalk & talk, PPT
		5.3	Essentials of School disaster education	T1, R3	1	Chalk & talk, PPT
		5.4	Essentials of School Disaster Education-Koba	T1, R3	1	Chalk & talk, PPT
		5.5	Essentials of School Disaster Education-Japan	T1, R3	1	Chalk & talk, PPT
		5.6	Community Capacity	T1, R3	1	Chalk & talk, PPT
		5.7	Disaster Resilience	T1, R3	1	Chalk & talk, PPT
		5.8	Community-based Disaster Recovery	T1, R3	1	Chalk & talk, PPT
		5.9	Community-based Disaster Management	T1, R3	1	Chalk & talk, PPT
		5.10	Community-based Social Capital	T1, R3	1	Chalk & talk, PPT
		5.11	Designing Resilience	T1, R3	1	Chalk & talk, PPT
		5.12	Building Community Capacity for Action	T1, R3	1	Chalk & talk, PPT
Total					12	
VI Multi- sectional Issues	CO 6: point out about public awareness and economic incentive possibilities [K4]	6.1	Impact of disaster on poverty and deprivation	T1, R3	1	Chalk & talk, PPT
		6.2	Climate Change adaptation and Human Health	T1, R3	1	Chalk & talk, PPT
		6.3	Linkages of Climate, Disaster and Health issues in Vietnam	T1, R3	1	Chalk & talk, PPT
		6.4	Exposure, Health Hazards and Environmental Risk: Study in Chennai, India	T1, R3	1	Chalk & talk, PPT
		6.5	Hydrometeorological Disasters and Agriculture	T1, R3	1	Chalk & talk, PPT
		6.6	Forest Management and Disaster Risk Reduction	T1, R3	1	Chalk & talk, PPT
		6.7	Rural Livelihood and Disaster Risk Reduction: A Case Study from Central Vietnam	T1, R3	1	Chalk & talk, PPT



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		6.8	Institutional Capacity in Disaster Management: The Red Cross and Red Crescent Movement	T1, R3	1	Chalk & talk, PPT
		6.9	Corporate Sector and Disaster Risk Reduction: A Community-focused Approach	T1, R3	1	Chalk & talk, PPT
		6.10	Essentials of Pre-disaster Recovery Planning	T1, R3	1	Chalk & talk, PPT
		6.11	The African Experiences of Disaster Risk Reduction	T1, R3	1	Chalk & talk, PPT
		6.12	Disaster, Environment and Development: Opportunities for Integration in Asia-Pacific Region	T1, R3	1	Chalk & talk, PPT
		6.13	Disaster Management: The Way Ahead	T1, R3	1	Chalk & talk, PPT
Total					13	
CUMULATIVE PROPOSED PERIODS					68	
Text Books:						
S.No.	AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION					
1	Rajib shah & R. Krishnamurthy, 'Disaster Management - Global Challenges and Local Solutions', First Edition, Universities Press, 2009					
2	Tushar Bhattacharya, 'Disaster Science and Management', First Edition, Tata McGraw Hill Education Pvt. Ltd., New Delhi, 2012					
3	Jagbir Singh, 'Disaster Management - Future Challenges and Opportunities', First edition, I K International Publishing House Pvt. Ltd, 2007.					
Reference Books:						
S.No.	AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION					
1	H K Gupta, ' Disaster Management', First edition, Universities Press (India) Pvt. Limited, 2003					
2	R.B. Singh, Disaster Management', First edition, World Focus, 2016.					
3	SULPHEY, M. M., 'Disaster Management', PHI Learning Pvt. Ltd., 2016.					
Web Details						
1	https://en.wikipedia.org/wiki/Disaster_management_in_India					
2	https://cna.ca/wp-content/uploads/2014/05/Chernobyl-Accident-and-its-Consequences.pdf					
3	https://www.academia.edu/31796955/PRINCIPLES_OF_DISASTER_MANAGEMENT					
4	https://www.academia.edu/34049107/Community_Based_Disaster_Preparedness_Planning					
5	https://nptel.ac.in/courses/105104183/					



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		Name	Signature with Date
i.	Faculty	Dr M.S.V.K.V.Prasad	
ii.	Course Coordinator	Dr M.S.V.K.V.Prasad	
iii.	Module Coordinator	Dr M.S.V.K.V.Prasad	
iv.	Programme Coordinator	Prof. G.V.L.N Murthy	

Principal