

Course Code: DIC105E	L	T	P	S	Credits
Disaster Proof future: Innovative strategies	2	0	0	1	03
<p>Course Objectives:</p> <p><i>This course introduces students to the natural disasters, their causes and impacts, and various disaster risk reduction strategies. This course aims to provide comprehensive understanding of the scientific principles underlying natural disasters and how scientific knowledge can be harnessed to enhance disaster resilience. Through combination of lectures, theoretical discussions, case studies, and practical's, students will gain comprehensive understanding of how to identify, investigate, monitor, and reduce the risk of potential disasters in the neighbourhoods.</i></p>					
<p>Course Outcomes:</p> <ul style="list-style-type: none"> • Concept, nature, origin and types of natural disasters • Causes and consequences of various types of natural disasters • Confccept of disaster risk reduction and its significance in modern society 					
<p>Course Contents:</p> <p>Module 1: Introduction to Disasters</p> <ul style="list-style-type: none"> • Hazard, Disaster, Exposure, Vulnerability, Risk, and Capacity; • Natural Disasters – Causes and Societal Impacts <p>Module 2: Types of Natural Disasters Geological Disasters – Earthquakes & Landslides; Hydro-meteorological Disasters – Floods, Flash-floods, Glacier Lake Outburst Floods (GLOFs)</p> <p>Module 3: Disaster Risk Reduction (DRR) Concept and Significance of DRR; DRR strategies for Earthquakes and Floods – Land-use planning; Structural measures; Ecosystem renovation; Early Warning System, Community awareness</p> <p>Module 4: Group Project Work</p> <ul style="list-style-type: none"> • In project work students (group of 3-4 students) will; • Prepare Rapid Survey/Assessment Reports. • Develop a disaster resilience plan/ disaster risk reduction strategy for a selected region or community. 					
<p>Suggested Readings:</p> <ul style="list-style-type: none"> • “Geological Hazards and Hydro-meteorological Hazards” www.nidm.gov.in • “Natural Hazards & Disaster Management Vulnerability and Mitigation” by R.B. Singh, 2012; Rawat Publications. • “An introduction to disaster management” by S. Vaidyanathan. • “Handbook of Disaster Risk Reduction & Management” by Christian N. Madu and Chu-Hua Kuei, 2017. 					

- *Other resources shall be shared during the course