

**DEPARTMENT OF GEOLOGY AND ENVIRONMENTAL SCIENCE. – CERTIFICATE COURSE DETAILS**

<b>Name of the Course</b>
<b>certificate course in Disaster Management</b>
<b>Course code</b>
<b>CPCC23</b>
<b>Offered by</b>
<b>DEPARTMENT OF GEOLOGY AND ENVIRONMENTAL SCIENCE</b>
<b>Course coordinator</b>
<b>SUBIN K JOSE</b>
<b>Partnership with</b>
<b>NILL</b>

<b>Course details</b>
<b>Online certificate course in Disaster management.</b>  <b>Duration: Two months (30 hours)</b> <b>Fee: 300/- (Three hundred only)</b> <b>Only hundred seats available (first come first basis)</b> <b>Eligibility: Plus two in any stream (Any one having genuine interest can also join).</b>
<b>What is the course?</b>
<b>Online certificate course in Disaster management.</b> <b>It is equal to audit course syllabus of University of Calicut (Semester 2-Equivalent to the audit course).</b>
<b>Scope of the course (minimum 3)</b>
<b>Recent years we have gone through many tough times because of natural disasters including flood, landslide and drought. Many of the disasters though appear to be natural, we can see the hidden anthropological activities behind. Society should have a good awareness about the disasters and how to respond to them. To study this course, we can act and response to cop with the disaster</b>
<b>Learning Outcomes (minimum 3)</b>
<b>Provide holistic approach to disasters.</b> <b>Provide information regarding management of disasters.</b> <b>Helpful for the sustainable development programmes</b>
<b>Course outline</b>

**Deal with different natural and anthropogenic disasters and its mitigation measures.** Disaster Preparedness and Response Concept and Nature Disaster Preparedness Plan. Role of Information, Education, Communication, and Training in disaster management.

### **Course Modules**

#### **Module 1:**

Introduction – Hazard and Disaster. Concepts of Hazard, Vulnerability, Risks. Different Types of Disaster : A) Natural Disaster: such as Flood, Cyclone, Earthquakes, Landslides etc B) Manmade Disaster: such as Fire, Industrial Pollution, Nuclear Disaster, Biological Disasters, Accidents (Air, Sea, Rail & Road), Structural failures (Building and Bridge), War & Terrorism etc. Slow Disasters (famine, draught, epidemics) and Rapid Onset Disasters (Air Crash, tidal waves, Tsunami) Causes, effects and practical examples for all disasters.

Water and Climate Disaster: flood, hail storms, cloudburst, cyclones, heat and snow avalanches, cold waves, droughts, sea erosion, thunder and lightning. Geological Disaster: landslides, earthquakes, Tsunami, mine fires, dam failures and general fires. Biological Disaster: epidemics, pest attacks, cattle epidemic and food poisoning. Nuclear and Industrial Disaster: chemical and industrial disasters, nuclear accidents. Accidental Disaster: urban and forest fires, oil spill, mine flooding incidents, collapse of huge building structures.

#### **Module 2:**

Natural disasters- Earthquakes, Tsunami, Floods, Drought, Landslides, Cyclones and Volcanic eruptions. Their case studies. Coastal disasters. Coastal regulation Zone.

Risk and Vulnerability Analysis 1. Risk : Its concept and analysis 2. Risk Reduction 3.

Vulnerability : Its concept and analysis 4. Strategic Development for Vulnerability Reduction

. Disaster Prevention and Mitigation. Refugee operations during disasters, Human Resettlement and Rehabilitation issues during and after disasters, Inter-sectoral coordination during disasters, Models in Disasters.

#### **Module 3:**

Disaster Preparedness and Response Concept and Nature Disaster Preparedness Plan

Prediction, Early Warnings and Safety Measures of Disaster. Role of Information, Education, Communication, and Training,

Introduction Disaster Response Plan Communication, Participation, and Activation of

Emergency Preparedness Plan Search, Rescue, Evacuation and Logistic Management Role of Government, International and NGO Bodies Psychological Response and Management (Trauma, Stress, Rumor and Panic) Relief and Recovery Medical Health Response to Different Disasters.

**Module 4:**

Rehabilitation, Reconstruction and Recovery Reconstruction and Rehabilitation as a Means of Development. Damage Assessment Post Disaster effects and Remedial Measures. Creation of Long-term Job Opportunities and Livelihood Options, Disaster Resistant House Construction Sanitation and Hygiene Education and Awareness, Dealing with Victims' Psychology, Longterm Counter Disaster Planning Role of Educational Institute.

**Module 5:**

The vulnerability atlas of India. Disaster Prevention and Mitigation. Agencies involved in Disaster Management. Warning and Prediction