

CIPE3009 DISASTER MANAGEMENT (3-0-0)

Course objectives:

- To understand about various aspects of disaster
- To have knowledge have disaster management mechanism
- To understand capacity building concepts and Disaster Management strategies

Module I

Understanding Disaster: Concept of Disaster - Different approaches- Concept of Risk - Levels of Disasters - Disaster Phenomena and Events (Global, national and regional) Hazards and Vulnerabilities: Natural and man-made hazards; response time, frequency and forewarning levels of different hazards - Characteristics and damage potential or natural hazards; hazard assessment - Dimensions of vulnerability factors; vulnerability assessment - Vulnerability and disaster risk - Vulnerabilities to flood and earthquake hazards, role of disaster in sustainable development, effect global climate change on disaster

Module II

Disaster Management Mechanism: Concepts of risk management and crisis managements - Disaster Management Cycle - Development, Prevention, Mitigation and Preparedness - Planning for Relief; disaster response, control and measurement, modern traditional methods of response, disaster recovery, medium and long term recovery aspects, recovery and rebuilding works

Module III

Capacity Building: Capacity Building: Concept - Structural and Nonstructural Measures Capacity Assessment; Strengthening Capacity for Reducing Risk - Counter-Disaster Resources and their utility in Disaster Management - Legislative Support at the state and national levels, Coping with Disaster: Coping Strategies; alternative adjustment processes - Changing Concepts of disaster management - Industrial Safety Plan; Safety norms and survival kits - Mass media and disaster management Planning for disaster management:

Module IV

Strategies for disaster management planning - Steps for formulating a disaster risk reduction plan - Disaster Management Act and Policy in India - Organizational structure for disaster management in India - Preparation of state and district disaster management plans, behavioral aspects of disaster management, insight challenges in management of disaster

Course outcomes:

After successfully studying this course, students will able to:

- Focus on equipping individuals to understand, plan for Disaster Management
- Respond to disasters by mastering risk assessment, mitigation strategies, emergency response
- Carrying out recovery processes, fostering community resilience, and applying tools like GIS, all while understanding national policies and humanitarian principles to save lives, protect resources, and rebuild effectively

Books:

- M. Pandey, Disaster Management, Wiley India, second edition
- R. Subramanian, Disaster Management, Vikas Publishing House
- T. Bhattacharya, Disaster Science and Management, McGraw Hill Education (India) Pvt Ltd
- R. Brinkmann and V. Bhamoriya, Introduction to sustainability, Wiley India, second edition