

**VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)**

DEPARTMENT OF CIVIL ENGINEERING

**DISASTER MANAGEMENT****(Open Elective-II)**

SYLLABUS FOR B.E. IV-SEMESTER

L : T : P (Hrs./week): 3 : 0 : 0	SEE Marks:60	Course Code: U200E410CE
Credits : 3	CIE Marks:40	Duration of SEE: 3 Hrs

<b>COURSE OBJECTIVES</b>	<b>COURSE OUTCOMES</b>
<i>Objectives of this course are to:</i>	<i>Upon the completion of this course the students will be expected to:</i>
<ol style="list-style-type: none"><li>1. Know about the state of art of disaster management in world and explore the history of the disasters and comprehend how past events have helped shape the future.</li><li>2. Study the various natural and manmade disasters and apply the mitigation measures</li><li>3. Expose students to various technologies used for disaster mitigation and management.</li></ol>	<ol style="list-style-type: none"><li>1. Attain knowledge on various types, stages, phases in disaster with international &amp; national policies and programmes with reference to the disaster reduction.</li><li>2. Understand various types of natural disaster, their occurrence, Effects, Mitigation and Management Systems in India</li><li>3. Understand different types of manmade disasters, their occurrence, Effects, Mitigation and Management Systems in India.</li><li>4. Explain the utility of geography information systems (GIS), Remote sensing technology in all phases of disaster mitigation and management.</li><li>5. Understand the Role of Remote Sensing and Geographical Information Systems (GIS) in Disaster Management</li></ol>

**UNIT-I**

**Introduction:** Hazard, vulnerability and risk, Types of disasters, Disaster management cycle, Progress of disaster management in world, vulnerability profile of India, Disaster management act, Disaster management in India

**UNIT-II**

**Natural Disasters – Hydro- meteorological based disasters:** Tropical cyclones, floods, drought and desertification zones - Causes, Types, effects and Mitigation measures.

**UNIT-III**

**Natural Disasters – Geographical based disasters:** Earthquake, Tsunamis, Landslides and avalanches – Causes, Types, effects and Mitigation measures.

**UNIT-IV**

**Human induced hazards:** Chemical industrial hazards, major power breakdowns, traffic accidents, etc.

**UNIT-V**

**Role of Remote Sensing and Geographical Information Systems (GIS) in Disaster Management:** Introduction to remote sensing and GIS, its applications in disaster management.

## **Suggested Books:**

1. Rajib, S and Krishna Murthy, R.R.(2012) “Disaster Management Global Challenges and Local Solutions”, Universities Press, Hyderabad, 2012.
2. Navele, P & Raja, C.K. (2009), Earth and Atmospheric Disasters Management, Natural and Manmade, B.S. Publications, Hyderabad, 2009.
3. Battacharya, T. Disaster Science and Management, Tata McGraw Hill Company, New Delhi, 2012.

### **The break-up of CIE: Internal Tests+ Assignments + Quizzes**

1	No. of Internal Tests:	02	Max.Marks for each Internal Test:	30
2	No. of Assignments:	03	Max. Marks for each Assignment:	05
3	No. of Quizzes:	03	Max. Marks for each Quiz Test:	05
Duration of Internal Test: 90 Minutes				