Faculty of Engineering and Technology

Bachelor of Technology

Effective from Academic Year: 2018-19

Branch Name:	Civil Engineering (Offered to Other Departments)
Semester/Year:	Semester V / Third Year
Subject Title:	Disaster Management (Open Elective)
Subject Code:	1ET1060506
Pre-requisite:	To develop basic understanding about conceptual applications of principles of management to mitigate various disasters.

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
				Theory (Marks)		Practical (Marks)		
Lecture (L)	Tutorial (T)	Practical (P)	Credit	University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	Total (Marks)
01	00	02	02	35	15	30	20	100

Subject Contents			
Sr. No	Topic	Total Hours	Weightage (%)
1	**Understanding of Disasters:** Understanding the Concepts and definitions of Disaster, Hazard, Vulnerability, Risk, Capacity – Disaster and Development, and disaster management	3	20
2	**Types of Disaster &Disaster Management in India:** Geological Disasters, Hydro-Meteorological Disasters, Biological Disasters, Technological Disastersand Manmade Disasters, Disaster Profile of India, Mega Disasters of India, Role of Government (local, state and national), Disaster Management Act 2005 & Amendments , Publisher by Govt. of India Non-Government and Inter-Governmental Agencies.	6	40
3	**Applications of Science and Technology for Disaster Management:** Geo-informatics in Disaster Management (RS, GIS, GPS and RS) Disaster Communication System (Early Warning and Its Dissemination).	5	40

Course Outcome:

After learning the course the students should be able to:

- Understand disasters, disaster preparedness and risks.
- Understand role of IT, remote sensing, GIS and GPS in risk reduction
- Understand disaster management acts and guidelines along with role of various stack-holders during disasters.

List of Reference Books:

1. Coppola D P, 2007. Introduction to International Disaster Management, Elsevier Science (B/H), London
2. Manual on natural disaster management in India, M C Gupta, NIDM, New Delhi
3. An overview on natural & man-made disasters and their reduction, R K Bhandani, CSIR, New Delhi
4. World Disasters Report, 2009. International Federation of Red Cross and Red Crescent, Switzerland
5. Roy, P.S. (2000): Space Technology for Disaster management: A Remote Sensing & GIS Perspective, Indian Institute of Remote Sensing (NRSA) Dehradun.

6. Sharma, R.K. & Sharma, G. (2005) (ed) Natural Disaster, APH Publishing Corporation, New Delhi.
7. Disasters in India Studies of grim reality, Anu Kapur & others, 2005, 283 pages, Rawat Publishers, Jaipur
8. Management of Natural Disasters in developing countries, H.N. Srivastava & G.D. Gupta, Daya Publishers, Delhi, 2006, 201 pages
9. Disaster Management Act 2005, Publisher by Govt. of India
10. National Disaster Management Policy, 2009, Govt. of India
11. Carter, W. Nick, 1991: Disaster Management, Asian Development Bank, Manila.

E-Resources:

www.GIS. Development.net
www.iirs.nrsa.org
http://quake.usgs.gov
www.nidmindia.nic.in