

Course Code : ENCM 32572
Title : Natural Disaster Management
Pre-requisite : ENCM 11512 & ENCM 11532
Co-requisite : None
Status : Optional, Theory

Learning outcomes:

After completion of the course unit, student will be able to;

- describe elements/components of disaster management,
- assess risk management options in natural disasters,
- discuss structural and non-structural disaster mitigation measures, and
- discuss practical issues of disaster management.

Course content:

Introduction to natural disasters: scope and objectives of disaster management, Concepts and terms in disaster management; Natural disasters vs. Man-made disasters, Disaster victim, Disaster relief systems, Phases of disaster response, Phases of relief operations, Risk and vulnerability of natural disasters, Elements/components of disaster management; preparedness, Response, Recovery, Prevention, Mitigation of natural disasters, Disaster management system; disaster prediction, warning, management and relief, Technologies of disaster management; mapping, remote sensing, communication and information management, Issues of disaster management, Case studies.

Method of teaching and learning:

A combination of lectures, computer based learning, assignments, case studies and small group discussions.

Assessment:

In-course assessment and end of semester examination.

Recommended reading:

1. Collins L. R. (2000). Disaster Management and Preparedness. CRC Press.
2. Singh R. B. (2006). Natural Hazards and Disaster Management: Vulnerability and Mitigation. Rawat publication.
3. Venkataraman L. & J. Schaake (2001). Surface Hydrology, Meteorology and Climate: Observations and Modeling, American Geographical Union.