United Nations Institute for Training and Research

Unitar Online Catalogue

Geo-Information in Disaster Situations - 6th Edition

Deadline: 29 Jan 2016

Type:	Course
Location:	Geneva, Switzerland
Date:	29 Feb 2016 to 11 Mar 2016
Duration:	15 Days
Thematic Area:	Satellite Imagery and Analysis
Website:	http://www.unitar.org/unosat
Price:	$2,200.00
Event Focal Point Email:	unosat@unitar.org
Contact Number:	0041 22 767 4020
Partnership:	University of Copenhagen

BACKGROUND

When disasters strike, the first thing the international early response community needs is information: What has happened, where did it happen, what is the effect, what response is needed? Not only can satellite imagery taken immediately after an event like an earthquake or tropical cyclone show what has happened through images of destroyed infrastructure or flood surge, but with their inherent geo-coding, one can tell immediately where the event took place and the extent of

the disaster. This is key information for an efficient planning and coordination of emergency response operations.

EVENT OBJECTIVES

The aim of the course is to enable participants to work with basic GIS tools and methodologies in preparation of disaster related maps in support of emergency response operations.

LEARNING OBJECTIVES

Upon completion of the course, participants will be able to:

- Define and describe basic concepts and terminology related to geospatial information technology
- Apply basic methods and functionalities of GIS software (ESRI ArcGIS) to manage and analyse spatial data
- Explain the role of Geo-information in the response phase of a disaster
- Undertake the process of map-making in support of emergency response operations
- Identify, search, collect, organize and analyse geospatial related information including GIS data
- Apply basic GIS methodologies to perform impact analysis and preliminary damage assessment in the immediate aftermath of a disaster

CONTENT AND STRUCTURE

The course is focused on providing insight into various tools available in GIS for situation mapping. Emphasis will be given to understand the concept of GIS and its integration in disaster situations. A central part of the course involves collecting pre and post disaster baseline data from web sources, preparing, and analysing and creating situation maps to support emergency response. Hands on experience with the field data collection tools like GPS, PDA and UAV will also be part of the course.

METHODOLOGY

This is a full-time, face-to-face course with lectures and GIS lab exercises using datasets from past disasters (80% lab exercises, 20% lectures and discussions).

The whole course is designed in a way to have a balanced approach between theoretical and practical methodologies, which will enable the students to gain maximum knowledge on the subject. It will be taught in lecture/discussion formats illustrated with Power Point presentations, live demos, videos, maps, diagrams, field visits, interactive sessions and content on web sites. The final case-study will be designed to give a near real-time scenario for the students to have confidence in handling similar situations in the near future.

The course is divided into 10 Modules offered over a two weeks period. Each module is structured into 4 sessions of 1.5 hour each. The average workload per week is likely to be around 25-30 hours.

There will be filed visits to various UN organizations in and around Geneva.

TARGETED AUDIENCE

Professionals working in DRM / DRR and humanitarian assistance who wish to strengthen their practical skills in GIS/RS applications for working in emergency response.

ADDITIONAL INFORMATION

Language:

English

Certificate:

Participants will be given a UN certificate from UNITAR on successful completion of the course.

Software:

The GIS lab exercises will be based on ESRI ArcGIS editor 10.3.1 with extensions (spatial analyst), Google Earth and internet access.

Participants MUST bring their own Windows laptops able to run ArcGIS software, for use during the entire duration of the course.

Class Size:

The number of participants is limited to 20 to ensure quality support is provided.

Institution:

This course is offered by UNITAR/UNOSAT in collaboration with the Master of Disaster Management Programme of the University of Copenhagen.

Accommodation:

Participants are expected to cover their own expenses pertaining to travel, housing and meals in Geneva.

Course Coordination:

Mr. Olivier Van Damme, Specialist at UNITAR/UNOSAT