Unitar Online Catalogue

Geospatial Information Technology (GIT) for Flood Risk Management (FRM)

United Nations Satellite Centre UNOSAT

Type:	Course
Location:	Web-based
Date:	16 Nov 2020 to 4 Dec 2020
Duration:	3 Weeks
Programme Area:	Satellite Imagery and Analysis
Website:	https://unitar.org/sustainable-development-goals/satellite-analysis-and-applied...
Price:	$0.00
Event Focal Point Email:	unosat-elearning@unitar.org

BACKGROUND

The UNITAR's Satellite Applications Programme (UNOSAT) in collaboration with CIMA Foundation, is currently implementing a nation-wide flood forecasting and early warning system for extreme flood events (GFEWS) as part of implementing activities under the project framework (2018-2020) "Strengthening Women's Disaster Management Capacities in Guyana and Dominica" . Along with the technical set-up of the flood-forecasting platform, additional capacity development activities will also be implemented by UNOSAT and its project

partners to enhance technical skills and knowledge of key national stakeholders about Flood Risk Management (FRM) and Flood Early Warning Systems (FEWS) .

As part of planned capacity development activities led by UNOSAT, an on-line technical training course on “GIT Applications for Flood Risk Management (FRM)”will be offered to selected national stakeholders with focus on the basic concepts and terminology related to Geospatial Information Technology and its applications relevant for flood hazard and risk mapping. Due to COVID-19 pandemic situation and travel restrictions, this technical training will be delivered as a self-paced online course.

EVENT OBJECTIVES

At the end of the Technical Course, participants should be able to:

- Define basic concepts, terminology and interlinkages related to:

1. Geospatial Information Technology (GIT) including Geographic Information Systems (GIS) and Remote Sensing (RS),
2. Disaster Risk Reduction (DRR) &
3. Flood Risk Management (FRM)

- Recognize relevant sources of geospatial data for flood analysis,
- Describe ArcGIS tools for geospatial data management and spatial analysis,
- Identify ArcGIS-based flood tool (GFT) and methodology to preform flood hazard assessment,
- Recall ArcGIS tools for flood risk assessment.

METHODOLOGY

To provide participants with flexibility in terms of attendance, the online course will be delivered through a period of 3 weeks. During this period participants will have the opportunity to take 5 modules along with quick quizzes and a final course questionnaire.

The opening webinar(Module 0), is planned for the first day of the course to introduce participants to the UNITAR Satellite Applications Programme (UNOSAT) and to provide them with a brief overview of activities implemented within the framework of the Guyana FEWS project including a short introduction to the

course and how to access training material through the online learning platform.

All training modules to be completed within the first two weeks will provide participants with theoretical concepts and case examples of specific topics through presentations, particular tutorial videos (demos), and additional reading material. For the self-study, selected reading material and a tailored made GIS booklet will be made available for all participants to practice acquired skills through step by step GIS tutorial(s).

The course will be delivered using a blended learning approach with a primary focus on asynchronous learning. Therefore, participants will be only requested to attend the opening webinar session while the rest of the course does not require real-time interaction. The course material will be entirely available online and accessible by training participant when it best suits their schedule. Moreover, in case of poor internet connection, participants will be allowed to download all content material for offline self-study.

The entire course together with the final assessment should be completed within this block of three weeks. The estimated total workload including online reading material and self-paced practice would be approximately 18 - 20 hours.

Coarse material and the estimated workload for each module are highlighted in the table below. Note, the stated workload does not include time needed for additional material and supplementary exercises.

TARGETED AUDIENCE

The course is designed to accommodate key stakeholders targeted by the Guyana's National Flood Early Warning System project with different professional backgrounds and working experience. Previous GIS and flood modeling experience is not required.

To adapt to the new situation imposed by COVID-19, the course will be fully online, however, the number of participants will be limited to maximum 30 participants.

ADDITIONAL INFORMATION

Training Evaluation & UNITAR Certificate

A compulsory pre- and post- evaluation survey will be sent to the participants to assess their level of knowledge before and after following the course including an overall evaluation questionnaire at the end of the course.

The participants will have to reach at least 75% passing score for each quick quiz and the final assessment. Upon successful completion of the course, the participants will be given a UN certificate from UNITAR