

## Introduction to Geospatial Information Technology Applications, Flood Forecasting and Early Warning Systems in West Africa

Satellite Analysis and Applied Research

Deadline: Closed

Type:	Course
Location:	Web Based
Date:	11 May 2020 to 30 Jun 2020
Duration of event:	2 Months
Programme Area:	Satellite Imagery and Analysis
Specific Target Audience:	No
Website:	<a href="https://unitar.org/sustainable-development-goals/satellite-analysis-and-applied-...">https://unitar.org/sustainable-development-goals/satellite-analysis-and-applied-...</a>
Price:	No Fee
Event Focal Point Email:	sumeera.kamil@unitar.org
Partnership:	World Bank, Economic Community of West African States, West African Sciences Service Center on Climate Change and Adapted Land Use (WASCAL), HKV, FUTA, WRI

### BACKGROUND

Operational Satellite Applications Programme (UNOSAT) of the United Nations Institute for training and Research (UNITAR), WASCAL, HKV, WRI & FUTA developed the e-learning courses for the ECOWAS member states in the context of the Building Disaster resilience in Sub Saharan Africa program, an initiative of the ACP Group of States, financed by the European Union and implemented by the World Bank.

The aim of these e-courses is to introduce the basic concepts of flood forecasting practices and Early Warning Systems in ECOWAS region. Participants will go through selected case studies of operational Early Warning Systems services and Geospatial Information Technology applications for Disaster Risk Reduction relevant to support operational decision making for enhanced flood management in ECOWAS region.

The course is designed to accommodate participants from a variety of backgrounds and early career technical staff from governmental institutions of ECOWAS member states working in disaster risk management sector and hydro-meteorological services. Registered participants should have an academic background and/or professional knowledge of hydromet numerical applications and basic knowledge in GIS and Remote Sensing Technology. The participation of women in this course is particularly encouraged.

## CONTENT AND STRUCTURE

The e-learning course is structured into 3 modules:

### **Module 1: Disaster Risk Reduction and National/Regional policy frameworks in ECOWAS region**

- Session 1: Introduction to Disaster Risk Reduction
- Session 2: Introduction to DRR Policies, Practice, Research and Capacity Building in West Africa
- Session 3: Challenges in Disaster Risk Reduction Policies at Regional and National Levels
- Session 4: Trend in Transboundary Flood Incidences and Implications for National and Regional Policies

### **Module 2: Use of Geospatial Information Technology for Disaster Risk Reduction**

- Session 1: Introduction to Geospatial Information Tools for Disaster Risk Reduction
- Session 2: Flood Risk Mapping and Assessment using Geospatial Information Technology

### **Module 3: Hydrological Modelling Development of Flood Forecast and Early Warning**

- Session 1: Introduction to Flood Forecasting and Early Warning
- Session 2: FFEW Model Input Requirement and Data
- Session 3: Hydrological Modelling and Flood Forecasting
- Session 4: Early Warning Generation and Dissemination

## METHODOLOGY

The language of the course is English and French. The course would be made available to an audience as a self-paced course in duration of almost two months. The course would not follow a set schedule so participants can take modules at any time. Course materials will be made available for participants as soon as the course begins so they can complete assignments and exams at their own pace.

## TARGETED AUDIENCE

Training is for all officials coming from ECOWAS member states.

## ADDITIONAL INFORMATION

Upon successful completion of the course, participants will receive a UNITAR certificate.

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