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OPENQUAKE ONLINE TRAINING

The OpenQuake online training initiative is part of the TREQ project activities, led by the GEM Foundation and funded by the U.S. Agency for International Development (USAID)

Module II - Earthquake Scenarios

Objectives

This module covers the basic concepts for seismic scenario risk assessment. Modelling alternatives in OpenQuake are presented for earthquake ruptures, exposure and vulnerability models. The module for scenarios is divided in two sessions:

PART 1: Ground motion fields

PART 2: Damage and losses

Learn how to prepare the required input files for the OpenQuake-engine, run an example, and visualise the results.

Course content

MODULE II - PART 1: Ground Motion Fields

This session presents the generation of ground motion fields due to deterministic seismic events. Learn the basic concepts to model a fault rupture in OpenQuake, how to prepare the required input files, run various examples, and compare results based on the modelling assumptions. (Duration: 3 hours)

Main concepts

Seismic faults, ground shaking intensity, ground motion models (GMPEs), ground motion fields (GMFs).

MODULE II - PART 2: Damage and Losses

This session starts from the ground motion fields generated in Part 1 to estimate damage and losses for a given earthquake scenario. Learn basic concepts for risk assessment, such as exposure and vulnerability models, prepare the required input files for OpenQuake, run an example and visualise damage and loss maps. (Duration: 3 hours)

Main concepts

Exposure models, vulnerability models, damage and loss statistics and maps.

Registration information

Register to the upcoming online sessions. Please note that there are only 30 available places for each training date. Reservation is on 'first come, first serve' basis.

Module II. Part 1

18th September, in Spanish
28th September, in Spanish
12th October, in English

Module II. Part 2

25th September, in Spanish
5th October, in Spanish
19th October, in English

Registration link

www.training.openquake.org/register

