

# GEM-EGU Summer School on GeoHazards Risk

University of Aveiro, Portugal  
8-12 of September 2025



## What is it?

The assessment of the impact from earthquakes has been historically performed considering each geohazard separately, and undoubtedly with a stronger focus on damage and economic losses caused by ground shaking. The damaging effects of earthquake-triggered hazards such as liquefaction, landslides, and tsunamis have been often neglected or considered in isolation.

This summer school gathers international experts covering the various facets of geohazards risk assessment to provide comprehensive and holistic training. This training will enable participants to perform earthquake scenarios using the OpenQuake-engine, considering the characteristics of recent events including the 2023 M7.8 Turkey and the 2025 M7.7 Myanmar earthquakes.

During this event, it will be possible to obtain an official OpenQuake-engine (Scenarios) certification.

## OK interesting, who will teach?

- **Vitor Silva** (University of Aveiro, GEM Foundation)
- **Romeu Vicente** (University of Aveiro)
- **Fatemah Jalayer** (University College London)
- **Finn Løvholt** (Norwegian Geotechnical Institute)
- **Maria Durante** (University of Calabria)
- **Christopher Brooks** (GEM Foundation)
- **Karim Aljawhari** (GEM Foundation)

## And out of curiosity, who is supporting this event?

This summer school is organized as part of a joint effort with the University of Aveiro, the Global Earthquake Model (GEM) Foundation, and the European Geosciences Union (EGU), with support from European Facilities for Earthquake Hazard and Risk (EFEHR).

## At the end of the school, what will I be able to do?

Participants will learn how to perform hazard and risk analysis using:

- open-source tools, in particular the OpenQuake engine of the GEM Foundation, and
- existing open models and datasets covering the District of Lisbon (Portugal), or datasets from their regions.

They will be able to:

- understand the different components required to perform hazard and risk analysis,
- produce the most important results, and
- learn how to present complex risk results to different stakeholders.

## Great, but how much does it cost?

The course costs EUR 400 which includes accommodation, coffee breaks, lunches, social dinner, and training material. The students are expected to cover their travel costs. Fee waivers and travel fellowships (up to EUR 1000) can be requested for applicants from lower or lower-middle income countries.

## Count me in, how do I register?

Due to the limited number of places (20), admission to the summer school is a two-step process. Please fill in this [form](#) indicating why you would like to attend the summer school, and how you plan to apply this knowledge, tools, and models in the future. Selected candidates will be informed and asked to finalize the registration process.

For additional information, please contact the coordinator of the Summer School at [vitor.s@ua.pt](mailto:vitor.s@ua.pt).