

IDENTIFICATION

Course code : E5BE9MS3
ECTS : 1

DURATION

Lectures : 4
Tutorial classes : 12
Labs : 0
Total : 16

Project :
Personnal work :

ASSESSMENT

Project grade

TEACHING MATERIALS

PowerPoint presentation

LANGUAGE

English

CONTACT

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UE : Modélisation

COURSE : Seismic and Cyclonic Risk

SCOPE OF THE COURSE

OBJECTIVES

Identify seismic and cyclonic phenomena. Extract the data necessary for design.
Understand dynamic calculations.

COMPETENCE AND SKILLS

Know the measures to be implemented. Master the design of building structures.

PROGRAM

- Seismicity : history, data for France
- Cyclones in Réunion
- Effects on structures
- Dynamic characterization of structures
- Oscillators
- Equation of motion
- Accelerographs and response spectra
- Soil behavior and induced effects (soil liquefaction, slope stability)
- Specific provisions for buildings (RC and steel frames)
- Pathology of structures under seismic loads

BIBLIOGRAPHY

REQUIREMENTS