UNIVERSITY OF SPLIT
UNIVERSITAS STUDIORUM SPALATENSIS

SPLIT SUMMER SCHOOL STSS2021

COURSE: GEOLOGICAL HAZARDS AND RISK ANALYSIS

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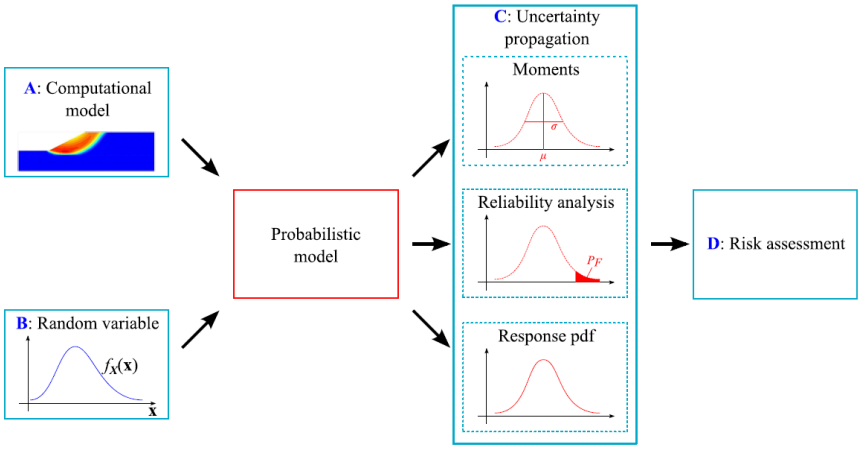
Main topics:

- Introduction to risk assessment of engineering systems
- Approaches to identify and statistically describe uncertainties
- Introduction to probabilistic analyses with state-of-the-art numerical tools
- Implementation of qualitative and quantitative risk analyses
- Development and discussion of measures to reduce risks

Source: https://geologyscience.com/natural-hazard/



Programme structure:

- 5-day course
- Lecture notes for each of the modules will be distributed to the students

Important dates:

Course dates: 06/09/2021 – 10/09/2021
Deadline for application: 23/07/2021
Confirmation of the course: 02/08/2021
Payment due by: 23/08/2021

Price of the course: 270 € (tax included)

Programme plan:

Day 1
- Introduction to risk assessment and geological hazards (1h)
- Basics of probability and statistics (3h)
- Individual work/exercise (2h)

Day 2
- Introduction to probabilistic analysis of engineering systems (2h)
- FOSM and FORM reliability methods (2h)
- Individual work/exercise (2h)

Day 3
- Monte Carlo method (2h)
- Introduction to risk assessment (1h)
- Individual work/exercise/final project (3h)

Day 4
- Qualitative and quantitative risk analysis (2h)
- Individual work/exercise/final project (4h)

Day 5
- Risk-based decision making (1h)
- Final project (3h)
- Project presentation (2h)

Programme lecturers:

Ph. D. Ivan Đepina M. Civ. Eng,
Postdoctoral fellow at the University of Split, Faculty of Civil Engineering, Architecture and Geodesy, Department of Hydromechanics and Hydraulics, Split, Croatia.

Ph. D. Ivo Andrić M. Civ. Eng,
Assistant professor at the University of Split, Faculty of Civil Engineering, Architecture and Geodesy, Department of Hydrology, Split, Croatia.