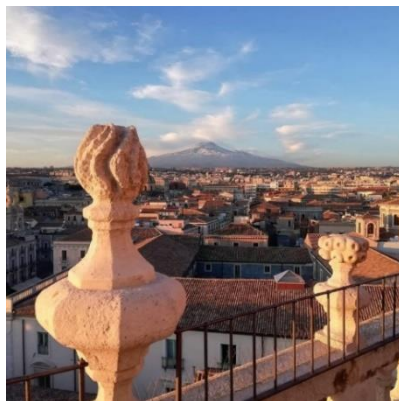


# Erasmus opportunities at the Department of Biological, Geological and Environmental Sciences



Università di Catania

Nestled against the majestic backdrop of Mount Etna, Catania enchants with its rich blend of Baroque architecture, vibrant markets, and a captivating history that stretches back millennia.



Embark on an enriching academic journey at the University of Catania (Italy), where in the frame of Master's program in Geology and Geophysics there are interesting English class opportunities for Erasmus - whether you are a Bachelor's or Master's student.

More info:  
<https://www.dipbiogeo.unict.it/it/content/incoming-students>

## BASIN ANALYSIS

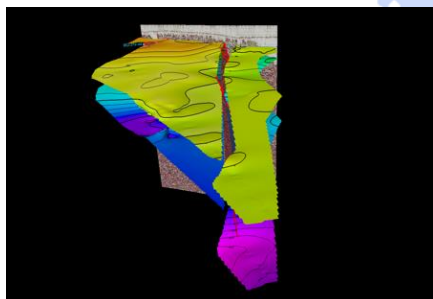
First semester (Oct.- Feb.)

The class introduces the basin analysis methods used in geo-resources exploration and gas storage (CO<sub>2</sub>, H<sub>2</sub>, etc.) with special emphasis on the integration of stratigraphic, structural, and geophysical data. Surface and subsurface data will be used to characterize carbonate, clastic and mixed depositional systems through time and space.

Syllabus



Prof. Rosanna Maniscalco  
[rosanna.maniscalco@unict.it](mailto:rosanna.maniscalco@unict.it)



## ENGINEERING SEISMOLOGY

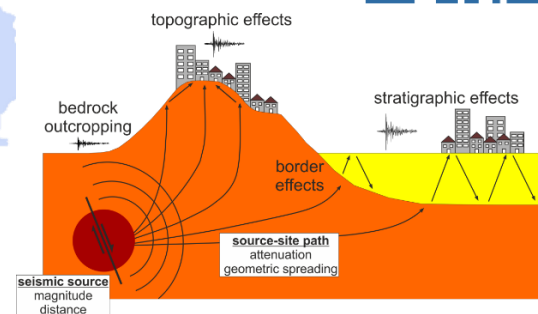
First semester (Oct.- Feb.)

In the class is explained how the disciplines of seismology, geology and earthquake engineering contribute to the evaluation of seismic hazard. The course includes the discussion related to ground motion parameters and seismic site effects. During the course recent earthquakes and their impacts are also discussed.

Syllabus



Prof. Francesco Panzera  
[francesco.panzera@unict.it](mailto:francesco.panzera@unict.it)



## IGNEOUS AND METAMORPHIC PETROLOGY

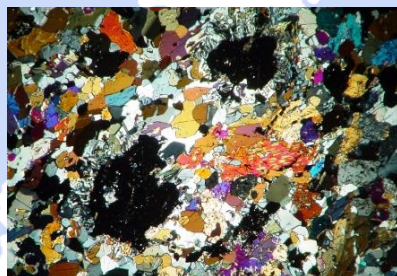
Second semester (Mar.-Jul.)

The class provides knowledge and skills to investigate in depth the origin and diversification of igneous and metamorphic rocks in specific tectonic settings, and their role in the growth and evolution of the continental crust. To this purpose, the course introduces modern and traditional tools and approaches, combining theory with case studies and practical sessions.

Syllabus



Prof. Patrizia Fiannacca  
[patrizia.fiannacca@unict.it](mailto:patrizia.fiannacca@unict.it)



## PETROPHYSICS

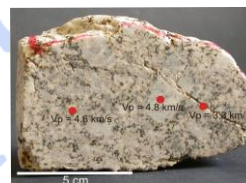
Second semester (Mar.- Jul.)

The class focuses on the physical properties of minerals and crustal and mantle rocks, with overview on the classical and innovative methodologies for the petrophysical characterization of rocks and geomaterials. Fields of applications are: petrophysical modeling, cultural heritage, environmental and health issues. The class includes practical activities in the laboratory.

Syllabus



Prof. Rosalda Punturo  
[rosalda.punturo@unict.it](mailto:rosalda.punturo@unict.it)



## VOLCANIC HAZARD AND MONITORING

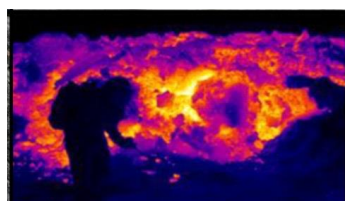
First semester (Oct.- Feb.)

The class focuses on the hazard and risk assessment in volcanic areas exposed to dangerous phenomena such as lava flow, tephra fallout, gas exhalation, tsunamis and lahars. The class looks at methods and models in various fields of the modern Volcanology useful to monitor active volcanoes and to identify the eruption precursory signals.

Syllabus



Prof. Marisa Giuffrida  
[marisa.giuffrida@unict.it](mailto:marisa.giuffrida@unict.it)



## VOLCANO-TECTONICS

First semester (Oct.- Feb.)

The class focuses on the relation between regional tectonic domains and volcanism, magma-chamber rupture due to magmatic excess pressure and hydrofracture injection to form dikes, sills and inclined sheets. Moreover, it provides element to study and to analyse volcanic features, to realize crustal geological profiles and to use the equations to assess the strain and stress fields on volcanoes.

Syllabus



Prof. Giorgio De Guidi  
[giorgio.deguidi@unict.it](mailto:giorgio.deguidi@unict.it)

