



UNIVERSITY OF
MESSINA
| founded in **1548**

Master's Degree in

GEOPHYSICAL SCIENCES FOR SEISMIC RISK



Scientific coordinator

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Department

Mathematics, Computer Science,
Physics and Earth Science



Duration

2 years



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→ Programme overview

Messina is paradigmatic of seismicity with its millennial history of devastating earthquakes and has a strong tradition in seismic monitoring and geophysical academic studies. In its long history, Messina (as whole Sicily) has been the heart of integration of cultures and populations coming from different countries and continents. For all these reasons, Messina is an ideal place for international research cooperation and high formation in Geophysics, with particular reference to earthquakes and seismic risk. The Master's degree course will furnish, in particular, practical skills through laboratory, field activities and training in private companies and professional institutions. The student can also decide to work with the support of Unime professors on the topic of seismic risk in his/her country or region of origin. International mobility is highly encouraged. This high-formation programme has agreements with various international partners with great expertise in the field of seismic risk:

- University of Thessaloniki (Greece);
- University of Istanbul Bogazici (Turkey);
- University of Malta.

→ Minimal entry requirements

Candidates must hold a Bachelor's degree (or equivalent) in scientific courses, with basic knowledge of Earth Sciences to be admitted.

The course commission will evaluate the candidate's qualifications for admission. Scan the QR Code for further admission requirements criteria.



→ Language requirements

International English language certificate issued by an Institution recognised by the Italian Ministry of University and Research (MUR), B2 level of the Common European Framework of Reference.

→ Study programme

YEAR 1

- Physics of Environmental Processes
- Prevention of Earthquake Disasters (Mod.A: Seismic Monitoring and Surveillance - Mod.B: Seismic Risk)
- Earthquake Geotechnical Engineering
- Additional Language Skills
- Earth Shallow Structure and Seismic Response (Mod.A: Active and Passive Seismology - Mod.B: Laboratory of Seismic Data Processing and Field Campaign)
- Environmental Geology
- Fundamentals and Applications of Petrology
- Geophysical tools (Mod.A: Geophysical Observation Methods and Remote Sensing - Mod.B: Tsunami Risk)

YEAR 2

- Quaternary Geology and Active Tectonics
- Applied Geology and Land Planning
- Physics for Cultural Heritage Protection
- Dynamics of Structures
- Seismo-induced Chemical Risk
- Student Choice Disciplines and/or Activities
- Training Course
- Thesis

→ International opportunities

UniME students have the opportunity to participate in the Erasmus+ Mobility programme both for study and training. Calls are published on the site twice per year.

Another opportunity for students is the UniME Funded programme "Students Around the World" (SAW) call for scholarships for study at the extra-European universities in the context of international cooperation agreements. For further information please visit our site.



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→ Job Opportunities

There are several job categories available for graduates, i.e. consulting, academic, government and local State administration. This degree prepares specialists in geophysics and geology to work in management roles in private and public organisations; consulting can be carried out for insurance companies, construction companies, etc. Graduates will be qualified to apply for the professional role of Senior Geologist in Italy. They can also work with civil engineers, land planners and civil protection officers. Another application is a profession in the area of Seismic Protection of Cultural Heritage Buildings, with a main focus on the high seismic risk region of the Mediterranean Sea.

→ Tuition fees

A fixed fee (€ 156.00) and a remaining amount of tuition calculated on the basis of a sliding scale. For further information:



This programme is very important for seismic risk analysis and management. We are learning some very important skills that I hope to take back home so we can avoid disasters caused by earthquakes. My professors are very qualified and help us when we have problems.

We have a lot of interesting activities.

Nirmal Panchal



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