



Università di Camerino  
Scienze e Tecnologie

# GEOENVIRONMENTAL RESOURCES AND RISKS

Università di Camerino  
**MASTER DEGREE**

**The course is entirely held in English**

**Class identification of the course**  
LM 74  
(Scienze e tecnologie geologiche)

**2 years**  
**Number of credits** 120 ECTS

**Location** Camerino, School of Science  
and Technology, Geology division  
via Gentile III da Varano  
62032 Camerino, Italy

**web site**  
[geologia.unicam.it](http://geologia.unicam.it)

*course coordinator and delegates*

**Coordinator**  
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## **INTRODUCING THE MASTER**

The course provides knowledge and practical expertise in the field of Earth Sciences related to the natural resources and the environmental hazards, aiming to form a geologist able to operate in: a) the study, exploration, exploitation and sustainable use of georesources (water, hydrocarbons, geomaterials, geothermal energy, b) the study of geological hazards (monitoring, evaluation, mitigation management, prevention).

During the study period, the combination of theory, practice, fieldwork and laboratory activities, as well as the knowledge acquisition of experimental analytical methods and data statistical processing and modeling, contributes to the cultural formation of the students. To specialize in the area of interest, 30 credits can be chosen to build up a personalized study plan, together with the thesis (30 credits) which requires a semester of independent experimental work.

Time is dedicated to the acquisition of interdisciplinary knowledge, especially useful in addressing environmental issues (like groundwater pollution, disaster management or effects of climate change) and transversal competences (use of advanced software and programming codes). Practical workshops held by geologists working in specific fields help introducing the students to the professional world.

Stages in private companies, territorial agencies, national and international research labs and universities, as well as study periods abroad within the Erasmus+ framework in EU or extra-EU countries (for exams and/or thesis), are particularly encouraged and supported by university grants. Grants for excellent or low-income students are available, as well as part-time jobs.

The course is entirely held in English, the thesis is written in English. Thank to international agreements, the Master is carried out also in collaboration with which allows the interested students to spend a semester in the partner university with the acquisition of credits.

The lessons will start in the first week of October, the timetable will be available at the end of September ([geologia.unicam.it](http://geologia.unicam.it)).

The academic year comprises two semesters, divided in lessons periods (October-January and March-June) and exams periods (February and June-September). The participation to field and laboratory activities is obligatory. A personal computer is required.

The course is certified  
under the AFAQ ISO 9001 quality system.



### Admittance conditions

BSc degree confirming completion 1st Cycle Degree level in Geosciences, Geophysics, Environmental/natural sciences, Engineering with suitable geology background is required. The students must also have a background in chemistry, mathematics and physics at university level.

The level of English language competence required is B2 (Independent user) of the CEFR.

Entrance tests and interviews will take place in the first week of lessons.

International students will be preliminary selected by evaluation of the CV to be sent to the Course coordinator and must refer to the Italian Embassy's regulations in their residence country.

### Study plan

#### 1st year

Environmental chemistry  
Groundwater resources and hydrological hazard  
Advanced field geology  
Geomaterials  
Petroleum geology  
Geostatistics  
English B2  
Elective activity courses

#### 2nd year

Seismic hazard  
Volcanic hazard  
Geophysical prospection  
Elective activities  
  
Thesis

#### Specialization areas:

Geodynamics and global tectonics  
Hydrogeological hazard and territory planning  
Experimental petrology and volcanology  
Geochemistry and geomaterials  
Water and energy resources  
Disaster management  
Geoarcheology and archeometry

The list of optional courses and activities available each year is notified at the end of September and they include (list is not exhaustive):

Structural geology, geothermes, coastal dynamics, sedimentary petrology, geofluids reservoirs, plate tectonics, seismiology, applied geophysics geochemistry and petrology, clastic facies models, sedimentology and stratigraphy, field geology, geomaterials laboratory, C programming, fortran programming, introduction to autocad, disaster management GIS, Advanced GIS, rock mechanics, waste management

### INFORMATION FOR ADMISSIONS, COURSES AND OTHER SERVICES

[www.unicam.it/international](http://www.unicam.it/international)

#### Didactic Manager

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