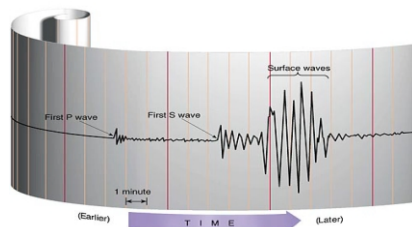


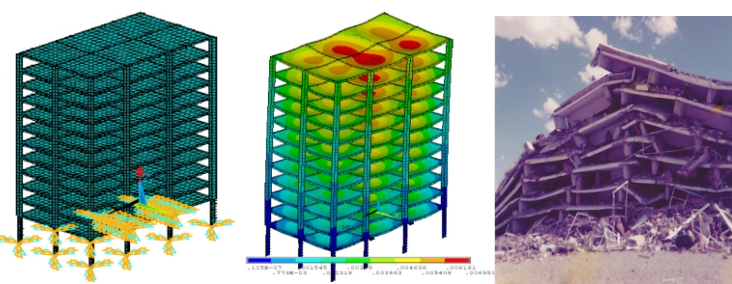
## International collaborations

The M.Sc. programme is supported by Academic/Research staff from Greek and Foreign Universities and Research Centers of the highest level:

- University College London, UK
- UCL Institute for Risk & Disaster Reduction, UK
- University of Portsmouth, UK
- Brunel University, UK
- Istituto Nazionale di Geofisica e Vulcanologia, Italy
- University of Bonn, Germany
- Istituto di Metodologie Avanzate di Analisi Ambientale/CNR, Italy
- University of Basilicata, Italy
- University of Camerino, Italy
- University of Ankara, Turkey
- Rutgers University, USA
- University of Lisbon, Portugal
- University of Avignon, France
- University of Koln, Germany



GEORR post-graduate students are encouraged to utilize ERASMUS+ mobility programme to attend classes and to carry out part of their Thesis in collaborated Universities and Research Centers



The Master of Science Programme

## Geoenvironmental Resources & Risks - GEORR

aims to provide extensive knowledge & expertise in the fields of Earth & Environmental Sciences.

The identification, availability, management and protection of georesources is a top priority issue for today society and a major topic for environmental planning and protection. The sustainable use of georesources and the relief of problems associated with their exploitation, such as the effects of pollution, are issues of fundamental importance for global Earth's environment and sustainability. The study and monitoring of geoenvironmental hazards is of fundamental importance for the society, mainly for the effects on people and the ecosystems, but also for the damage caused on the infrastructures. The geoenvironmental evaluation of localization of high risk industrial sites, of major public works, and the georisk safe selection of waste disposal sites, will be issues of increasing importance towards the protection of human lives and environment, mainly due to the effects on people and the ecosystems, but also due to the potential damage caused on the infrastructures.

### Aim

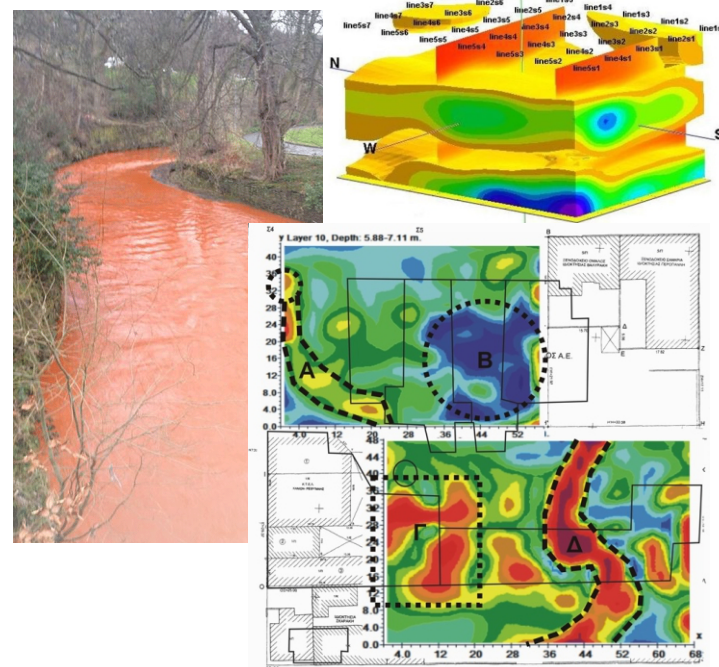
The purpose of the programme is the education and training of high level graduates in the field of geoenvironmental natural resources and natural disasters. Through the M.Sc. programme, students acquire modern interdisciplinary background and expertise in Geoenvironmental Sciences, cutting edge technology, powerful skills for successful academic and professional carrier, in today's competitive international environment.

### Duration

The duration for the award of the M.Sc. degree is three semesters (full time), of which the third is for the preparation of the thesis in collaboration with National and European research laboratories.

## Entry requirements

A minimum requirement of a Bachelor's degree in a relevant discipline from a Greek University or Technological Educational Institute or an overseas qualification of an equivalent level. For non-European students, information on how to enroll is provided by Greek Embassy/Consulate in their Country. European students can apply for admission either directly at the Registrar's Office of the M.Sc. programme or through the internet. Detailed information is available at the official website of the programme: [www.georr.chania.teicrete.gr](http://www.georr.chania.teicrete.gr)



## Information

Prof. Filippas Vallianatos, M.Sc. programme Director  
Technological Educational Institute of Crete,  
School of Applied Sciences  
Dept. of Environmental & Natural Resources Engineering  
Tel. 28210 23016,  
e-mail: [fvallian@chania.teicrete.gr](mailto:fvallian@chania.teicrete.gr)

<http://georr.chania.teicrete.gr>

## Programme Structure

The M.Sc. programme consists of one and a half years of study (90 credits). The curriculum focuses on the study of natural resources and geoenvironmental hazards. The programme is entirely taught in English, stimulating Greek students to open to the professional world outside Greece and, on the other hand allowing foreign students and high academic-level instructors to participate. This international atmosphere creates a constructive exchange of experiences and cultures, making the students ready for the international job market. This curriculum also allows the participation of incoming ERASMUS students.

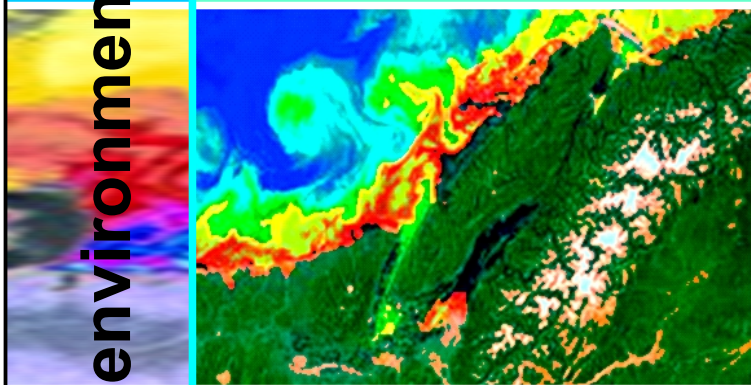
## Programme modules

Course title	T	ECTS	Course title	T	ECTS
<b>1<sup>st</sup> semester</b>			<b>2<sup>nd</sup> semester</b>		
Environmental Chemistry & Contamination	C	7.5	Water Resources & Hydrogeological Hazards	C	6
Applied Geology & Geoenergy Resources	C	7.5	Advanced Geophysics & Seismology	C	6
GIS & Remote Sensing	C	7.5	Advanced Geochemistry	C	6
Geophysical Prospecting – Methods & Environmental Applications	C	7.5	Environmental Physics & Geomaterials	C	6
<b>2<sup>nd</sup> semester - optional courses</b>			<b>3<sup>rd</sup> semester</b>		
Numerical Modeling of Environmental Problems & Structures	O	6	Dissertation - Thesis	C	30
Remote Sensing in Georesources & Natural Hazards	O	6	Notes: 1. Students choose one of the optional courses of the 3 <sup>rd</sup> semester. 2. Symbols: C=Compulsory Core Taught module O=Optional Taught module ECTS=European Credit Transfer & Accumulation System		
Coastal systems	O	6			
Advanced Topics in Georesources & Natural Hazards	O	6			

<http://georr.chania.teicrete.gr>

# Master of Science Programme

## Geoenvironmental Resources & Risks



Department of Environmental & Natural Resources Engineering

Technological Educational Institute of Crete



## Employability - Career

The MSc programme in "Geoenvironmental Resources and Risks" will provide essential training for careers in Georesources evaluation and geohazard assessment which include those in georesources & environmental industry, engineering, international insurance, and re-insurance industry, academic research, civil and environmental protection agencies and organizations on Emergency Planning and Environmental Management, related to aid and development. Graduates may further continue to Ph.D. studies.

**Top career destinations** include the global job market on water resources and hazards, GIS and Remote sensing, Global Georisks and georesources, Contamination and Urban Planning, Environmental Geophysics, Geochemistry and Geoinformatics.

## Research Fields

Indicative scientific fields of expertise offered by the M.Sc. programme are:

- Groundwater Resources & Hydrogeological Hazards
- Environmental geophysics
- Geographic Information Systems & Remote Sensing.
- Geodynamics, Georisks and Seismic hazard .
- Computational modeling and simulation of seismic behavior of structures.
- Contamination hazard, territorial planning and coastal Systems.
- Geochemistry & Geomaterials
- Environmental Hazard, Disaster Management & Civil protection.
- Geoenergy Resources.

## Scholarships

Top level students enrolled at GEORR are eligible to apply for scholarships provided by research funds or teaching assistanceship.