Postgraduate Program of Studies in
EARTH SCIENCES AND THE ENVIRONMENT (M.Sc.) 2019-2021

Specialization: "*Applied Environmental Geology and Geophysics*"

This course is designed to equip students with an advanced, interdisciplinary knowledge of applied geology (engineering geology, hydrogeology and geophysics) with special emphasis ontechniques related to environmental protection and management (land and water pollution, urban planning and regional sustainable development, natural hazard mitigation)addressed with the use of remote sensing and GIS.

FIRST YEAR

SEMESTER I (1st)

No.	*AREA*	*Code Number*	*MODULES*	*COMPULSORY (C) or ELECTIVE (E)*	*ECTS CREDITS*
1.	***Applied Environmental Geology and Geophysics***	*GEO_AGG01*	*Geology of ground-water occurrence*	***C***	***6***
2.		*GEO_AGG02*	*Applications of Engineering Geology in infrastructure projects*	***C***	***6***
3.		*GEO_AGG03*	*Natural hazards and the environment*	***C***	***6***
4.		*GEO_AGG04*	*Applications of Remote Sensing and GIS in Applied Environmental Geology*	***C***	***6***
5.		*GEO_AGG05*	*Geophysics in Civil Engineering and Water resources*	***C***	***6***

SEMESTER II (2nd)

No.	*AREA*	*Code Number*	*MODULES*	*COMPULSORY (C) or ELECTIVE (E)**	*ECTS CREDITS*
1.	***Applied Environmental Geology and Geophysics***	*GEO_THE1*	*M.Sc Thesis I*	***C***	***16***
				***ELECTIVE* (selection of two)**	
2.		*GEO_AGG06*	*Hydrogeochemical processes-Water Quality*	***E***	***7***
3.		*GEO_AGG07*	*Geotechnical surveys and studies - Instrument and monitoring*	***E***	***7***
4.		*GEO_AGG08*	*Advanced Seismological Applications*	***E***	***7***
5.		*GEO_AGG09*	*Fieldwork using mobile GIS, GNSS (GPS) and UAV-USV*	***E***	***7***

*** (selection of two)**

SECOND YEAR

SEMESTER III (3d)

No.	*AREA*	*Code Number*	*MODULES*	*COMPULSORY*	*ECTS CREDITS*
1.	***Applied Environmental Geology and Geophysics***	*GEO_THE2*	*M.Sc. Thesis II*	***C***	***30***