

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

FIRST YEAR

SEMESTER I (1st)

a/a	AREAS	Code Number	LESSONS	COMPULSORY	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
1.	Data processing and analysis in Earth Sciences	GEO_CAD01	Lithosphere tectonics and mechanics	C	8
2.		GEO_CAD02	Sedimentary Environments and Geochemical Processes	C	8
3.		GEO_CAD03	Geological processes in coastal and deep sea environments	C	7
4.		GEO_CAD04	Natural Hazards	C	7
1.	Earth Materials - Environment	GEO_OME01	Environmental impacts from exploitation of earth materials – Rehabilitation of landscape and the environment	C	8
2.		GEO_OME02	Earth materials and environmental applications	C	8
				ELECTIVE (selection of two)	
3.		GEO_OME03	Advanced topics in Mineralogy/Petrology/Ore Geology	E	7
4.		GEO_OME04	Earth Materials and Sustainable Development	E	7
5.		GEO_OME05	Instrumental methods for the analysis of earth materials	E	7
6.		GEO_OME06	Volcanic Hazards	E	7

SEMESTER II (2nd)

a/a	AREAS	Code Number	LESSONS	COMPULSORY	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
	Data processing and analysis in Earth Sciences			COMPULSORY	
1.		GEO_THE1	MSc Thesis I	C	16
				ELECTIVE (selection of two)	
2.		GEO_CAD05	Processing and analysis of structural geology data	E	7
3.		GEO_CAD06	Analysis of sedimentary basins - Stratigraphy	E	7
4.	GEO_CAD07	Analysis and interpretation of marine geophysical data	E	7	

5.		GEO_CAD08	Collection and processing of Paleontological and Stratigraphic data	E	7
	Earth Materials - Environment			COMPULSORY	
1.		GEO_THE1	M.Sc Thesis I	C	16
				ELECTIVE (selection of two)	
2.		GEO_OME07	Preservation and Promotion of the Geologic and Cultural Heritage	E	7
3.		GEO_OME08	Clays and the Environment	E	7
4.		GEO_OME09	Gemstones	E	7
5.		GEO_OME10	Geochemical processes in soil protection systems	E	7
6.		GEO_OME11	Archaeometric approaches for the study of ancient ceramic and stone artefacts	E	7
7.		GEO_OME12	Geological, Industrial and Environmental Applications of Organic Petrology	E	7

SECOND YEAR

SEMESTER III (3rd)

a/a	AREAS	Code Number	LESSONS	COMPULSORY	ECTS CREDITS
1.	Applied Environmental Geology and Geophysics	GEO_THE2	M.Sc. Thesis II	C	30
1.	Data processing and analysis in Earth Sciences	GEO_THE2	M.Sc. Thesis II	C	30
1.	Earth Materials - Environment	GEO_THE2	M.Sc. Thesis II	C	30