

MSc IN GEOLOGY: TECHNIQUES AND APPLICATIONS

Duration: 1 year, full time. 60 ECTS.

Language: Spanish.

Program aims:

Modern and contemporary knowledge has been characterized by an excessive subdivision of disciplines, having little information flow among them. Geological Sciences are not an exception, making difficult the understanding of Earth as an interconnected system. To cope with this shortcoming, the 'MSc in Geology: Techniques and Applications' offers a broad spectrum of topics with a large percentage of cross-curricular and multidisciplinary contents, both in core and optional subjects. The core subjects are designed to give the student a comprehensive training in: (i) instrumental techniques common to many geological disciplines, (ii) data management tools, and (iii) communication skills for technical and non-technical audiences. This cross-curricular system provides the student with a very useful set of tools that are not usually included in MSc courses. Moreover, students have a wide choice of optional subjects, which allows them to design specific academic career paths, focused either on research or on a professional career.

Structure:

Students must enroll in the following compulsory subjects:

Subject	ECTS	Semester
60430 - Methods and techniques in Geology ^{ELF}	12	S1
60431 - Analysis, visualization and modelling of geological data ^{ELF}	10	S1
60432 - Scientific and technical communication skills ^{ELF}	6	S1
60443 – Master's Dissertation ^{ELF} *	12	YL

Additionally, students must select 4 subjects from the following list:

Subject	ECTS	Semester
60433 - Paleontology and dynamics of the biosphere ^{ELF}	5	S2
60434 - Economic and applied mineralogy ^{ELF}	5	S2
60435 - The Earth: processes and interactions at large scales ^{ELF}	5	S2
60436 - Facies analysis and sedimentary models: principles and applications ^{ELF}	5	S2

60437 - Geohazards analysis and mitigation methods ^{ELF}	5	S2
60438 - Subsurface geology ^{ELF}	5	S2
60439 - Climatic changes, associated events and geologic record ^{ELF}	5	S2
60440 - Underground geological repositories ^{ELF}	5	S2
60441 - Integrated basin analysis ^{ELF}	5	S2
60442 - Characterization of geological materials: techniques and applications ^{ELF}	5	S2

***Master's Dissertation**

The Master's Dissertation (MD) is a 300– hour compulsory project. Students are supervised by a professor who defines the specific objectives of the Project and guides them along the work. Students must write a report and make a public defense of it.