Ac. Yr	2018/2019	

Department		**Earth and Environmental Sciences (DISAT)**	@	marco.orlandi@unimib.it (Director) paolo.frattini@unimib.it (President of degree course) alessandro.tibaldi@unimib.it (Coordinator of Internationalisation) angela.sanna@unimib.it (Secretary of Geological Sciences)
CDL		Scienze e Tecnologie Geologiche	BSc	Geological Sciences and Technologies
CDLM		Scienze e Tecnologie Geologiche	MSc	Geological Sciences and Technologies
DOTTORATO			PhD	
Website		www.disat.unimib.it,		

The exams of all the courses of the Bsc and Msc degrees can be given in English.
Here below the list of the Msc courses entirely taught in English:

Master in Geological Sciences			
Year 1	SUBJECTS	CFU	CONTENTS and AIMS
Sem. I	**Active tectonics and volcanotectonics** (Prof. A. Tibaldi).	6	Methods of geological-structural analysis for the recognition of recent and active tectonic deformations, and for the analysis of the structures in volcanic areas.
Sem. I	**Sedimentary petrography** (Prof. S. Andò)	6	Basic skills in optical methods, mineral separation, and interpretation of petrographic and mineralogical data.
Sem. I	**Physics of the sea** (Prof. C. Pasquero)	6	Knowledge of the physics of the oceans, use of mathematical and physical models for the description and understanding of geophysical fluid dynamics. Oceanographic data tools.
Sem. I	**Introduction to Marine Physical Geography** (Dr. A. Savini)	8	Description of the geomorphologic framework of coastal and underwater environments, through the study of morphologies and associated dynamic processes. Main seafloor mapping techniques.
Sem. II	**Geobiology** (Prof. D. Basso)	8	Coevolution of geosphere and biosphere, principles of biomineralization, biogenic carbonates, bioconstruction and habitat engineers, sediments and benthos, benthic zonation, introductory biogeochemistry and proxy data in natural archives, past and ongoing global changes.
Sem. II	**Biofacies-Module I: Benthic facies and applied marine paleoecology** (Prof. D. Basso)	4	Technical skills to plan, analyse and interpret the results of paleontological and paleo-ecological investigations. Use of palaeoecology in the reconstruction of recent environmental changes in and marine coastal areas.
Sem. II	**Biofacies-Module II: Microfacies and pelagic paleoenvironment** (Dr. E. Malinverno)	4	Knowledge of the microfossil groups which are useful to define a biostratigraphic and paleoenvironmental framework. Taxonomic bases for the identification of the main planktonic species.
Sem. II	**Geological Risk Analysis** (Prof. Paolo Frattini)	6	Concepts and methodologies for the analysis and mitigation of geological risks, with particular emphasis on flood, landslide, seismic, snow avalanche, and volcanic risks.

Year 2	SUBJECTS	CFU	CONTENTS and AIMS
Sem. I	**3D Geomodelling** (Dr. A. Bistacchi)	4	3D geological modelling with advanced software used in the oil industry. After an introduction on the theory of geomodelling, most of the lectures will be devoted to practical workstation exercises.
Sem. I	**Advanced methods in structural geology** (Dr. A. Bistacchi)	4	Collection and analysis of integrated structural geology datasets at different scales.
Sem. II	**Geoenergy** (Prof. Giovanni Crosta)	4	Description and analysis of main natural resources for energy production (geothermal systems, hydrocarbons, MHs), in terms of geologic and reservoir characteristics, and associated physical and mechanical processes and problems (e.g. heat transport, multiphase flow)
Sem. II	**Paleoceanography and Paleoclimatology** (Dr. E. Malinverno)	5	Climate system, its variability and teleconnections; climatic variations at different time scales; main oceanographic processes in the present and in the past.
Sem. II	**Geochronology and Archeometry** (Prof. Igor Villa)	6	Geochronology, isotope geochemistry, archeometry