

The study program

International Master of Applied and Exploration Geophysics

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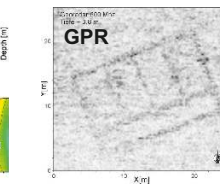
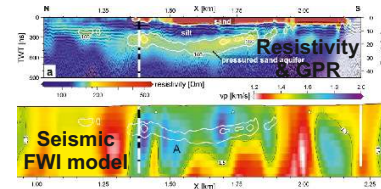
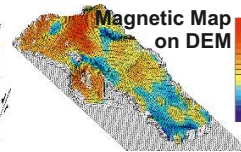
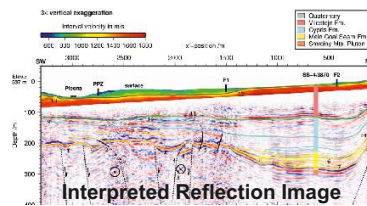
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Summary

The Departments of Earth Sciences and of Physics, Università di Pisa (UP), and the Department of Applied Geosciences and Geophysics, Montanuniversität Leoben (MUL) have established a joint master program in Applied and Exploration Geophysics starting fall 2018. The study program is in English, and it covers theoretical and practical aspects of reflection and refraction seismology, signal analysis, inverse problems, potential fields, rock physics, reservoir and borehole geophysics, near-surface geophysics, and mining and engineering geophysics.

UP has an MSc program in Exploration and Applied Geophysics since 2007, having as partner industries ENI, Halliburton/Landmark and Enel GreenPower. MUL has converted its MSc program in Applied Geosciences to English already in 2016. MUL has a close collaboration with OMV and DMT. The research focus at both universities is on seismic processing and inversion, and on rock physics, with an emphasis on exploration and environmental applications. Students can enroll at either university. During their studies, they will spend at least one term at the partner university. Graduates will be awarded diplomas in Applied and Exploration Geophysics from MUL, and from UP.



Courses

ECTS

Università di Pisa

Exploration Seismology	6
Rock Physics	6
Inverse Problems in Geophysics	6
Radar Geomorphology	6
Applied Geophysics	6
Digital Data Processing Laboratory	6
Seismic Data Processing Laboratory and Field Campaign	6
Introduction to Well-Logs	3
Seismic Imaging	6

MUL

Reflection Seismology	2,5
Lab in Reflection Seismology	2,5
Mineral Exploration Geophysics	2
Induced Seismicity	2,5
Petrophysics and Formation Evaluation	4,5
Geophysical and Geochemical Field Project	4
Time Series Analysis	2
Inverse Theory and Modelling	5,5
Integrated Geophysical Field Workshop	5
Geophysical Seminars	0,5
Advanced Borehole Geophysics	4
Geophysical Reservoir Characterization	4
Engineering Geophysics	2,5

plus Seminars

and elective modules in Geology, Computer Sciences and Math and Physics