

## APPLICATIONS AND REQUIREMENTS

International candidates must have a Bachelor's degree in Geological Sciences, Environmental Sciences, Physics, Mathematics, Civil and Environmental Engineering, Telecommunications Engineering, Electronic Engineering, or have an equivalent diploma. Adequate knowledge of English is mandatory (B2 level).

Candidates must apply online at [applymscenglish.unipi.it](http://applymscenglish.unipi.it). Successful applicants must follow the University of Pisa's standard enrolment procedure.

More details at: [www.unipi.it/enrolment](http://www.unipi.it/enrolment).

**Website**  
[www.dst.unipi.it](http://www.dst.unipi.it)

**Study Programme Director**  
Prof. Adriano Ribolini  
[adriano.ribolini@unipi.it](mailto:adriano.ribolini@unipi.it)

**Programme Coordinator and Welcome Office**  
Dr. Letizia Baldini  
[letizia.baldini@unipi.it](mailto:letizia.baldini@unipi.it)

**General Information**  
Dr. Andrea Tognarelli  
[andrea.tognarelli@unipi.it](mailto:andrea.tognarelli@unipi.it)

Prof. Alfredo Mazzotti  
[alfredo.mazzotti@unipi.it](mailto:alfredo.mazzotti@unipi.it)

Join us  
STUDY IN  
ITALY



[www.unipi.it](http://www.unipi.it)

[www.dst.unipi.it/master-s-degree-course-in-exploration-and-applied-geophysics.html](http://www.dst.unipi.it/master-s-degree-course-in-exploration-and-applied-geophysics.html)



# MSc Programme in Exploration and Applied Geophysics



## ENROLMENT AND FEES

Enrolment instructions are available at [matricolandosi.unipi.it/en](http://matricolandosi.unipi.it/en).

Fees depend on the student's country of origin and vary from € 356 euros to € 2,452 for each academic year.

Information on fee waivers, extraordinary contribution and scholarships can be found at [www.unipi.it/tuition-fees](http://www.unipi.it/tuition-fees).

## UNIVERSITÀ DI PISA

The University of Pisa (UNIPi) is a public institution composed of twenty departments, with high level research centres in the fields of agriculture, astrophysics, computer science, engineering, medicine, veterinary medicine and geosciences.

Established in 1343, UNIPi is one of the most prestigious Italian higher education institutions and a modern centre for teaching and advanced research.

One of the University's main strategies is that of internationalisation as it aims to engage with students and researchers and establish longterm partnerships with universities and public and private institutions from all over the world.

With a current student population surpassing 54,000, UNIPi offers a large number of degree programmes held in English and a variety of exchange programmes.



## Study Geophysics in Pisa

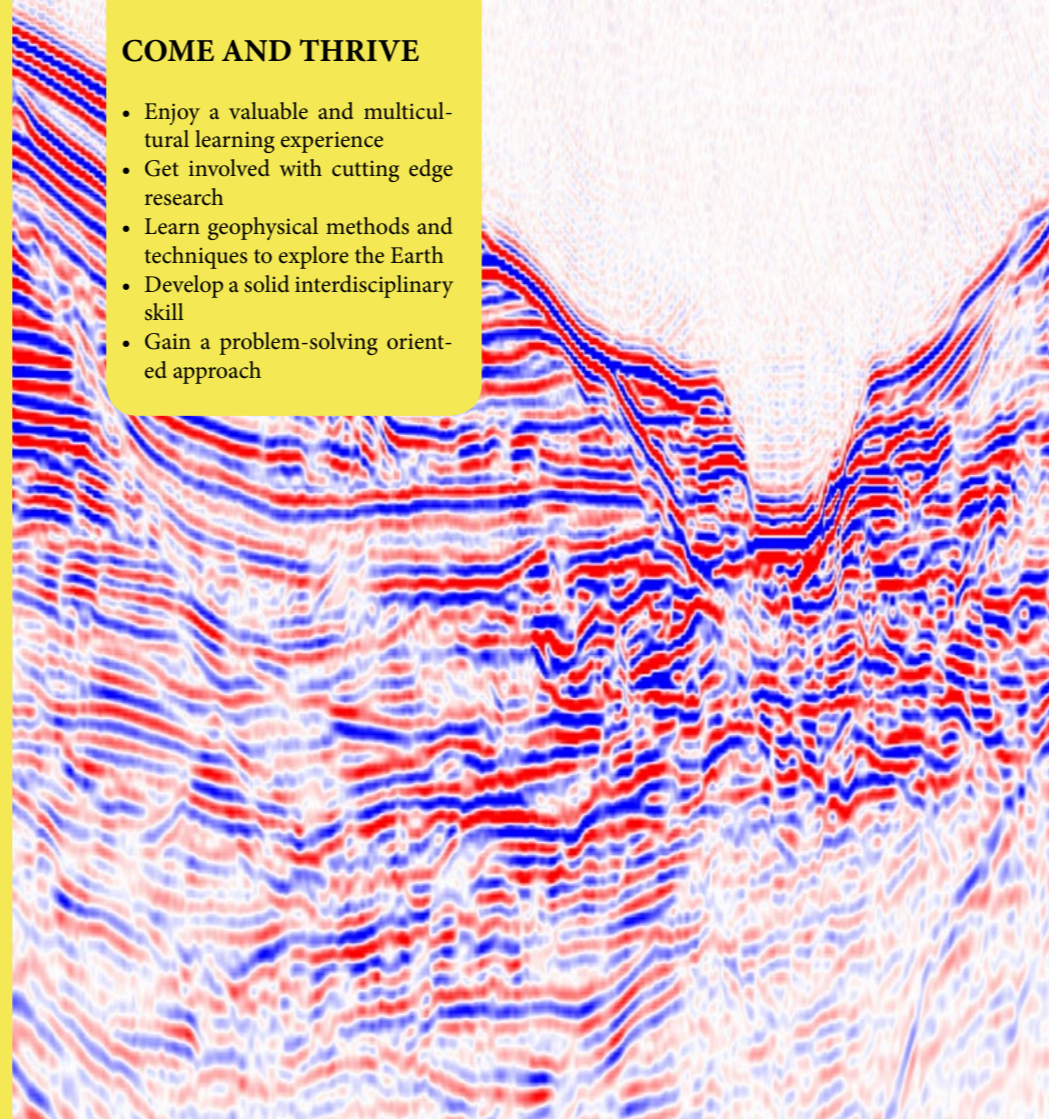
*The MSc in Exploration and Applied Geophysics was established by the Department of Earth Sciences and the Department of Physics, with the contribution of the Department of Information Engineering, of the University of Pisa, and the Polytechnic of Milan. The MSc trains geophysicists with a solid preparation and with specialized skills to face and solve geophysical and engineering problems. The principal applications of the acquired knowledge are in the domains of exploration and production of energy and mineral resources, investigation for engineering and environment, and geological and archaeological research.*

*The MSc is supported by numerous public and private institutions collaborating through specialized courses, seminars and internships. The students will acquire hands-on experience using industry standard software and equipment.*

*Students enrolled in the MSc course may also apply for admission to the Double Degree Programme "International Master of Applied and Exploration Geophysics", jointly developed by the University of Pisa and the Montan University of Leoben (Austria).*

## COME AND THRIVE

- Enjoy a valuable and multicultural learning experience
- Get involved with cutting edge research
- Learn geophysical methods and techniques to explore the Earth
- Develop a solid interdisciplinary skill
- Gain a problem-solving oriented approach



## PROGRAMME OVERVIEW

FIRST YEAR	ECTS
Exploration seismology and geophysical well-logs	9
Laboratory of digital data processing	6
Laboratory of seismic data processing and field campaign	6
Signal Processing for Physics	6
<b>TOTAL</b>	<b>27</b>
COURSES SELECTED ON THE BASIS OF STUDENT BACKGROUND	ECTS
Complements of Mathematics and Physics	6
Rock Physics	6
Instrumentation for Geophysics and potential Geophysics	6
Fundamentals of Geology	6
Radar Geomorphology	6
Applied Geophysics	6
Tectonics & Sedimentation	6
Seismic Imaging	6
Geoarchaeology and Geophysical techniques	3
Complements of Electromagnetism and Optics	3
<b>TOTAL</b>	<b>54</b>
SECOND YEAR	ECTS
Inverse Problems in Geophysics	6
Applied Geophysics	6
Final Examination	40

Exploration and Applied Geophysics is a discipline that combines principles of physics with knowledge of geology, engineering and digital signal processing to develop non-invasive investigation methods and techniques aimed at studying the Earth's subsurface (from few centimeters to few kilometers), as well as human artefacts.

## PROFESSIONAL PROSPECTS

Our graduates develop strong interdisciplinary skills and learn how to use an approach which is oriented towards problem solving. By the end of the programme, they will possess a high quality curriculum attractive to many innovative industries acting in the worldwide "geophysical market". This market includes the geophysics for natural resources (hydrocarbon, geothermal, mining), environment, civil engineering and archaeology.