Master Program in Geophysics

With geophysical skills required by oil and gas exploration disciplinary, students in the International Master Program of Geophysics could be well prepared to embark upon either an industrial career or an academic one after graduation. Most of the courses focus on petroleum geophysics, with topics of rock physics, seismic modeling and imaging, and modern well logging. These courses are all given by distinguished professors from world leading universities, which could bring students to the academic frontier and greatly help with the improvement of international prospect.

Meanwhile, the program devotes to creating more communication among faculties and students, providing students more chances to develop communication skills and practicing team work. With creative thinking stimulated, problem-solving ability and initiative and self-discipline of our students will be built at the same time.

GOAL OF FOSTERING

Graduates will gain expertise in

- Rock physics
- Seismic data processing
- Seismic modeling, inversion and interpretation
- Modern well logging
- Well logging and reservoir interpretation
- Non-seismic exploration methods
- Understanding the technical and economic context of petroleum geosciences
- Working in teams, with a developing capability to take the lead when necessary
- Giving oral presentations
- Writing concise and effective reports

CURRICULUM

Courses requirement:

Total credit is no less than 30.

Fostering time:

3 years for fully registered students or 4 years for partly registered students.

RESEARCH DIRECTION

- Petroleum geophysical exploration
- Petroleum geophysical well logging

COMPULSORY COURSES

- Development of geophysics
- Seismic anisotropy and interpretation
- Seismic data processing and inversion
- Rock physics
- Well logging interpretation
- Advanced well logging
- Reservoir geophysics

SOME OPTIONAL COURSES

- Seismic modeling and imaging
- Non-seismic exploration methods
- Seismic sedimentology
- Geostatistics
- Introduction to seismic data processing software
- Introduction to digital rock
- Scientific writing in English

COORDINATION:

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