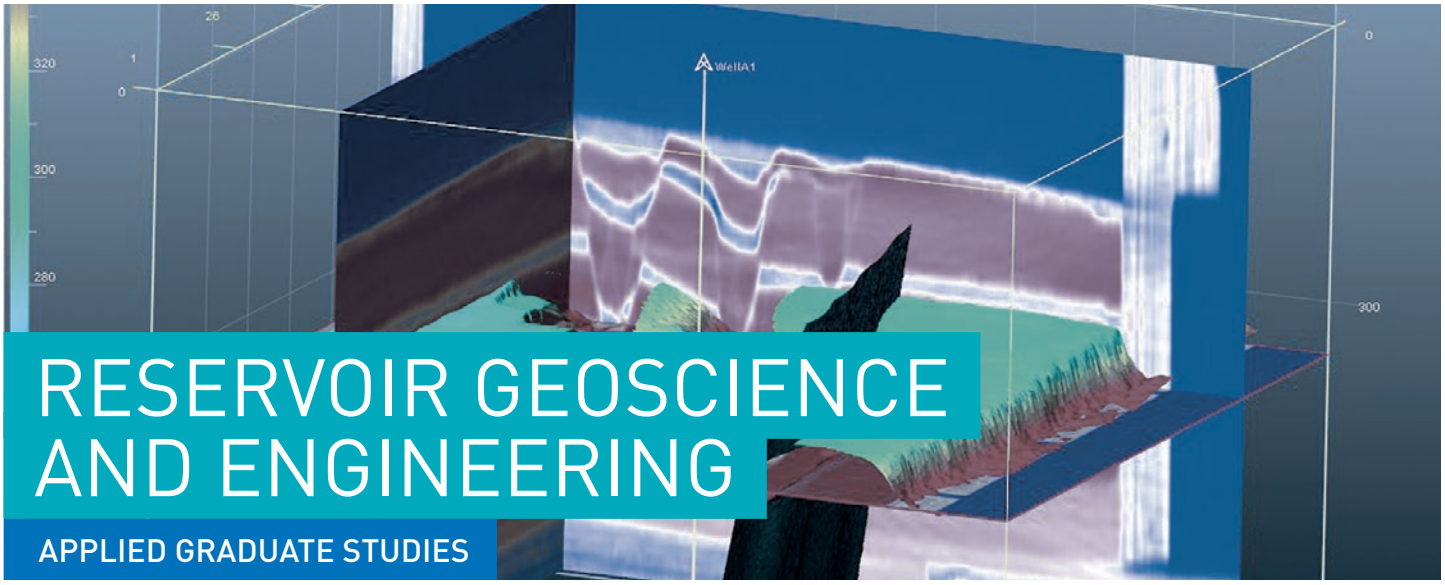


RESERVOIR GEOSCIENCE AND ENGINEERING

APPLIED GRADUATE STUDIES

Language: **English** | Duration: **16 months** | **IFP School's Master's degree (or *Diplôme d'ingénieur spécialisé*) and possibly the partner institution's Master's degree (for double-degree track)**

Did you know that understanding the architecture of reservoirs and rock-fluid interactions are key factors when it comes to optimizing production? The complementary skills of geoscientists and engineers are essential to their success. By completing the Reservoir Geoscience and Engineering program, you'll master both the methods and the tools used to sustainably produce Oil & Gas fields, to develop storage capacity for gas and CO_2, and even to exploit geothermal resources. Following your case-based training, you'll be recruited for your operational capabilities and your ability to lead projects in an international and multicultural environment. Accept the challenge!

PARTNER INSTITUTIONS

- Texas A&M University (USA)
- Gubkin University National University of Oil & Gas (Russia)
- Instituto Tecnológico de Buenos Aires (Argentina)
- Bandung Institute of Technology (Indonesia)
- Kazan Federal University (Russia)

The world demand for energy is constantly growing. This industry is facing a key challenge: the sustainable, optimized exploitation of natural resources (e.g. oil and gas), not only in fields already in production but also in those yet to be discovered.

Two professionals play a major role in improving the production of hydrocarbon reservoirs: the reservoir geoscientist and the reservoir engineer. They require multiple skills and are mutually complementary. A reservoir geoscientist characterizes reservoir architecture and estimates the volume of trapped hydrocarbons. A reservoir engineer describes the in-place fluids and proposes an optimum and sustainable development strategy. Moreover, they will be capable of innovating and working in multicultural and multidisciplinary teams.

By choosing IFP School's Reservoir Geoscience and Engineering program, you will be a part of a great adventure. In an exceptional academic setting, you will begin by following the common core courses before moving on to the optional modules that will allow you to further strengthen your specialization in either geosciences or reservoir engineering. You can also opt for a partnership program with a foreign university (TAMU – USA, Gubkin – Russia, ITBA – Argentina, ITB – Indonesia, or KFU – Russia) to obtain a double degree.

IFP School is a cosmopolitan environment. In the Reservoir Geoscience and Engineering program, around 80% of the students come from outside France -from every continent. We firmly believe that such a cultural blend stimulates student and faculty dynamics. Our classes are taught in English and many of your projects will be conducted by multicultural teams.

The Reservoir Geoscience and Engineering program prepares you to deal with real situations. You will conduct numerous case studies based on actual data from the field.
You will tackle geological objects through field trips. You will also use current industry-specific software.

Students choosing the professions of reservoir geoscience or reservoir engineering will ultimately work in international environments that require a high level of skills and geographic mobility. They will take advantage of the wide variety of career opportunities offered by Oil & Gas operators, service and engineering companies, the geothermal energy industry, etc.

CAREER OPPORTUNITIES

- **Oil & Gas companies (IOC and NOC)**
- **Oil & Gas equipment and service companies**
- **Geothermal energy industry**
- **Underground storage industry**
- **Energy consulting companies**
- **International institutions**

Find out more: **www.ifp-school.com**

IFP SCHOOL

RESERVOIR GEOSCIENCE AND ENGINEERING

APPLIED GRADUATE STUDIES

TYPICAL CLASS PROFILE/ MAIN SPONSORS

Most of the students are supported by companies (through sponsorships or study leave) that finance their living expenses during the academic period and contribute towards their tuition.

Among these companies, the following have been IFP School partners in recent years (non-exhaustive list):
BP, Cepsa, Ecopetrol, Engie, Equinor, ExxonMobil, Gazpromneft, Lukoil, Perenco, Petrobras, PTT, Saudi Aramco, Schlumberger, Total.

PROGRAM CONTENT

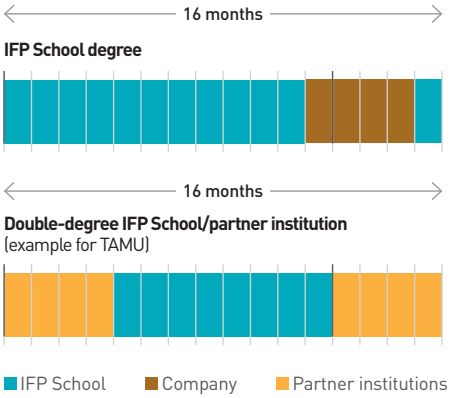
	IFP School (single-degree track)	IFP School/TAMU (double-degree track)
Fall term	*At IFP School* • Fundamentals of Geosciences I • Fundamentals of Geosciences II • Fundamentals of Reservoir engineering I • Fundamentals of Reservoir engineering II	*At TAMU* • Fluid flow in petroleum reservoirs • Petroleum reservoir description • Production engineering • Unconventional Oil & Gas
Spring and Summer Terms	*At IFP School* • Production mechanisms • Well logging • Well testing and interpretation • Well performance • Reservoir characterization and modeling (RCM) • Reservoir simulation • Reservoir geology • Advanced reservoir simulation • Advanced RCM • EOR • Unconventional HC & CO_2 management • Fractured reservoirs	
Fall term	Internship in a company	*At TAMU* • 4 courses
Optional spring term	---	*At TAMU* (optional) Additional courses and research thesis

This program is indicative only.
Other courses may be selected by the students according to their initial education and to the requirements of the thesis.

Moreover, a wide variety of courses are offered by the other partner institutions (in Argentina, Indonesia and Russia) for the first fall term and the second fall term.

PROGRAM SCHEDULE

The two examples of schedules shown below correspond to the most frequently encountered cases for students in this program: 16-month program for students with a 4- or 5-year engineering degree, either entirely at IFP School, with an induction period in a company, or with two terms on the partner's campus (TAMU, Gubkin, Tyumen, ITBA, ITB, Kazan) to obtain a double degree.



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Find out more: **www.ifp-school.com**