

# PETROLEUM ENGINEERING AND PROJECT DEVELOPMENT



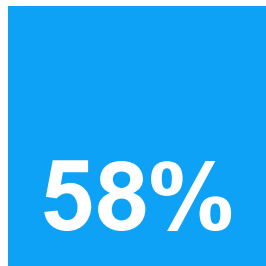
Did you know that the Oil & Gas industry is experiencing a profound transformation? It must face the challenges of energy transition, optimizing the production of Oil & Gas fields while limiting CO<sub>2</sub> emissions related to their operation and ensuring maximum security. When you realize that on average, recovery rates level off at 35%, and that 1% more would cover 2 years of worldwide consumption... every innovation is worth considering! In our Petroleum Engineering and Project Development program, your training will be based on actual case studies from the industry, so you'll be prepared to meet its challenges. Go for it!

## LES POINTS CLÉS DU CURSUS

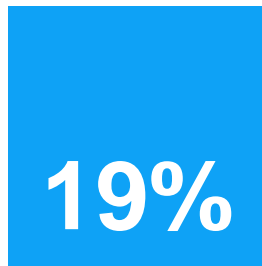
**Applied  
teaching, Field  
internships,**

Diversity of professions

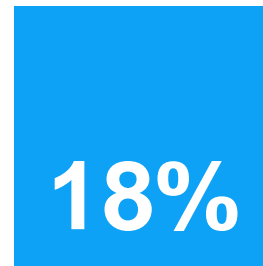
## LES DÉBOUCHÉS POUR LE PROGRAMME



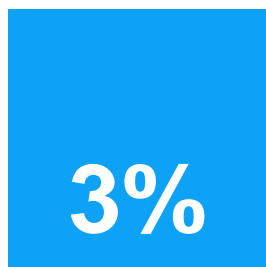
French oil and gas companies



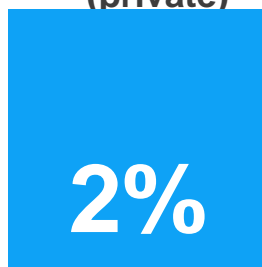
Foreign oil companies (private)



Oil and gas equipment and services



National oil companies



Others

## PROGRAMME & CALENDRIER

### Program

Reservoir

 Fundamentals of reservoir engineering

- /// Reservoir characterization
- /// Georesource production mechanism
- /// Reservoir modeling and simulation

### **Drilling-completion**

- /// Well engineering
- /// Conduct of drilling operations
- /// Well productivity
- /// Drilling-completion project

### **Production**

- /// Development of offshore fields
- /// Effluent treatment
- /// Process engineering and energy efficiency
- /// Integrated production projects

### **Transverse skills and professional attitudes**

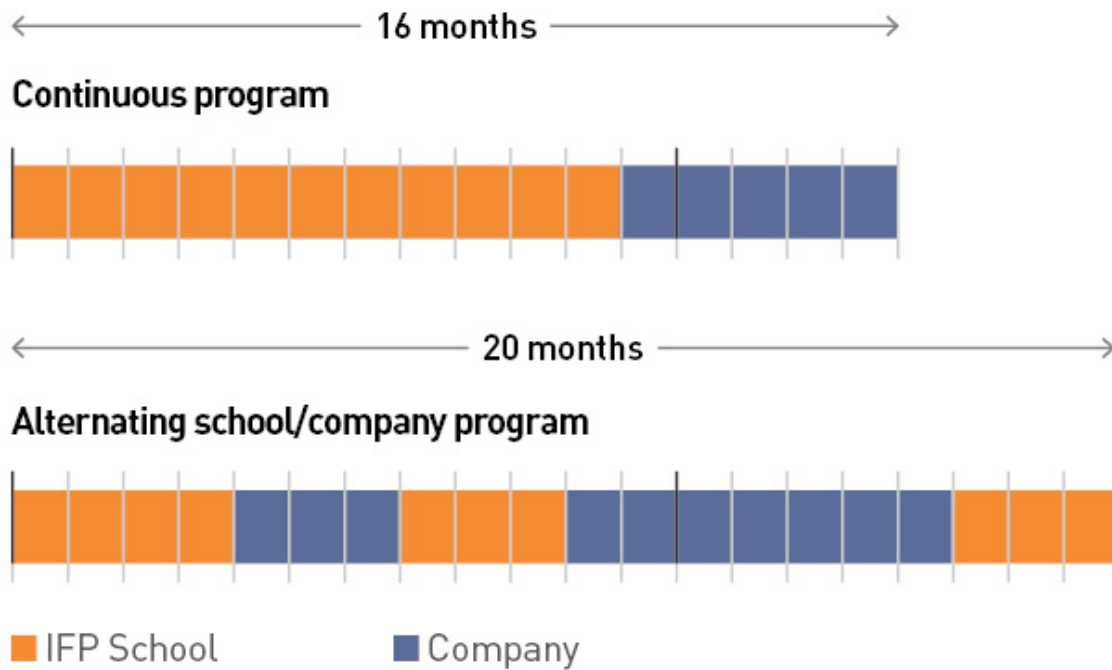
- /// [Professional Skills Module](#)
- /// [Innovation and Entrepreneurship Module](#)

**In addition, HSE issues – particularly concerning safety – are addressed in all courses.**

## **Planning**

The two examples of schedules shown below correspond to the most frequently encountered cases for students in the program:

- /// a 16-month continuous program for students with a 4- or 5-year engineering degree;
- /// an alternating school/company 20-month program for students with a 5-year engineering degree.



There are other possible cases, such as:

- /// an 11-month continuous program for a student with a 5-year engineering degree who has already had placements in a company for at least 4 months, approved by IFP School at the time of admission;
- /// a 22-month alternating school/company program for an engineering student in the penultimate year of a major European school or university having signed a double-degree agreement with IFP School.

## OPPORTUNITÉS DE CARRIÈRES

### Fields

- /// Oil & Gas companies: IOC, NOC
- /// Oil & Gas service and equipment companies
- /// Drilling contractors
- /// Underground storage operators
- /// Geothermal energy companies

/// Consulting companies

/// Big data companies

## Jobs

This program concerns the entire oil and gas production chain, from the reservoir containing the hydrocarbons in the subsurface, to drilling and surface-installed production facilities. It leads to three main job families: reservoir engineering, drilling engineering and production engineering.

/// **Reservoir engineers** study the production potential of reservoirs and the technical means to be implemented to optimize recovery rates.

/// **Drilling engineers** study, design and lead drilling operations and maintenance operations in oilfield wells.

/// **Production engineers** work on engineering surface production facilities designed to process oil and gas products, monitor projects, or are involved in facility operation.

Combining these fields of expertise in a single program fosters a broad vision between the professions that optimizes oilfield production for the teams working in this field, whether for operating oil companies or service providers.

## FINANCEMENT & SPONSORING

### Typical class profile

Students in this program are almost all sponsored by companies (through sponsorships, apprenticeships or as seconded professionals) that finance their living expenses during the academic period and contribute towards their tuition.

### Principaux sponsors

Among these companies, the following have been IFP School partners in recent years (non-exhaustive list):

BP, Cepsa, Elengy, Engie, Equinor, Flexi France, IFPEN, Lundin, Maurel & Prom, Perenco, Saipem, Schlumberger, Shell, SMP, Storengy, TechnipFMC, Total.