

# ENERGY AND MARKETS



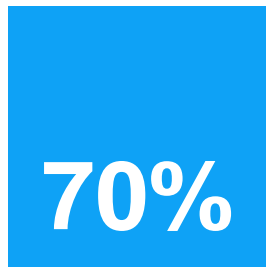
The energy sector is in the midst of a profound transformation and is seeking to hire young professionals equipped with both practical skills and a comprehensive understanding of the field. Our Energy and Markets program provides an outstanding education. It offers you the chance to acquire high-level, energy, environment, economy, business modeling skills and an in-depth understanding of the industrial dynamics observed in the electricity, gas, petroleum and related markets. You will be equipped to play an important role in the energy transition, supporting technological advances with an economic and financial mindset that is essential to succeed.

## LES POINTS CLÉS DU CURSUS

**Actor in the  
energy  
transition,  
Project**

management,  
Technical and  
economic skills

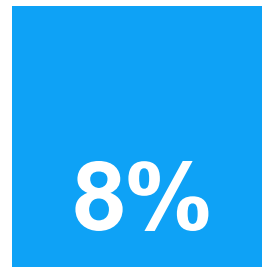
## LES DÉBOUCHÉS POUR LE PROGRAMME



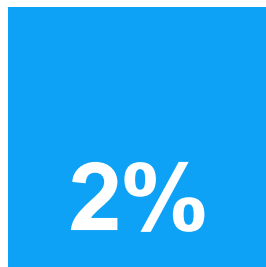
Oil, gas, energy



Automobile



Consulting &  
banking





Others

## PROGRAMME & CALENDRIER

### Program

**Economy: theory and applications**

-  Microeconomics and industrial economics
-  Macroeconomics and the economic environment

- /// Economics of energy and the environment

## **Energy and environmental management**

- /// Energy geopolitics
- /// Energy systems management (renewables, electricity, gasoline, natural gas, etc.)
- /// Management of the energy transition

## **Corporate finance**

- /// Capital budgeting and investment modeling
- /// Financial management
- /// Cost control

## **Market finance**

- /// Energy commodities and CO2 markets
- /// Risk management

## **Quantitative techniques**

- /// Massive data processing
- /// Mathematical programming and applications in the energy sector
- /// Econometrics

## **Technology**

- /// Extraction and processing of finite resources
- /// Operation of the network industries (electricity and natural gas)

## **Transverse skills and professional attitudes**

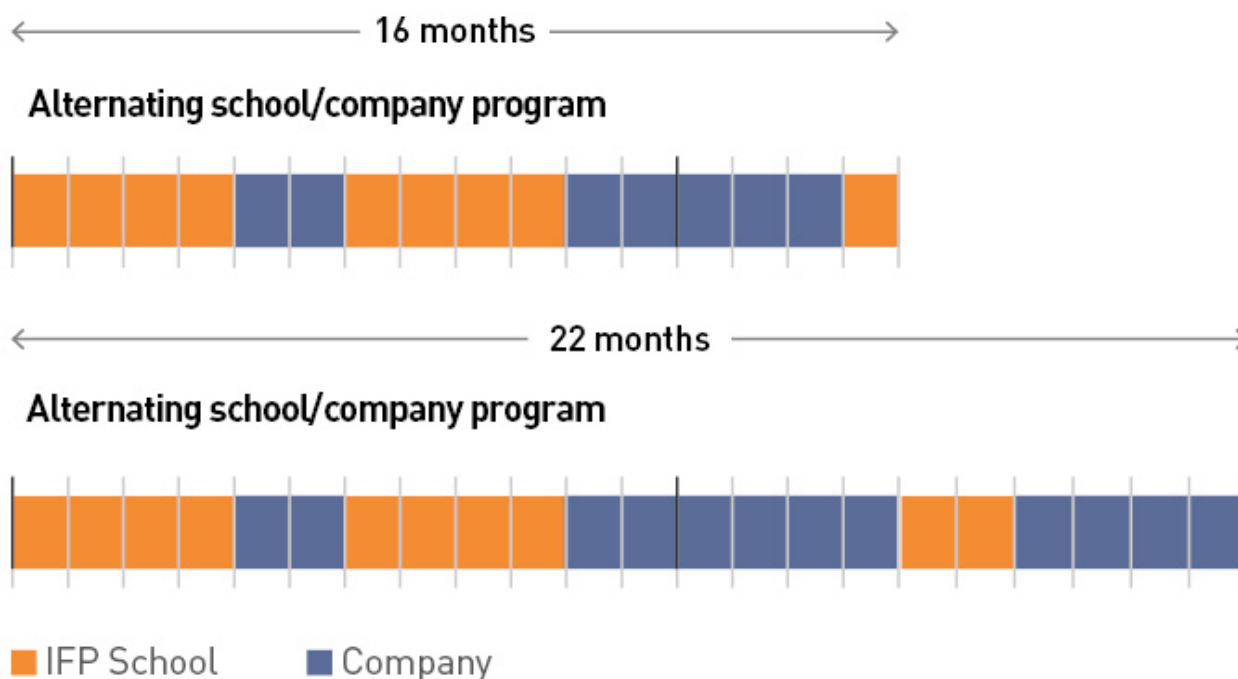
- /// Experience Sharing Module

# **Planning**

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

- /// a 16-month alternating school/company program for students with a 5-year engineering degree;
- /// a 22-month alternating school/company for an engineering student in the penultimate year of

/// a major European school or university having signed a double-degree agreement with IFP School.



There are other possible cases, such as: an 18-month alternating school/company program for an engineering student who has completed four years of higher education, enrolled in a major European school or university under an agreement with IFP School and who has completed one year of professional work experience.

## OPPORTUNITÉS DE CARRIÈRES

### Fields

- /// Utilities (electricity, natural gas)
- /// Energy infrastructure operators
- /// Oil companies, oil equipment manufacturers and service providers
- /// Energy trading companies
- /// Consulting companies
- /// Major energy consumers
- /// Investment banks
- /// Transportation sector


 Regulatory agencies

## Jobs


Our program provides students with both technical and economic skills, so there is a wide range of employment opportunities, both in terms of industrial sectors and types of jobs.

A few key examples:


### Cost engineer in the automotive industry

 Estimates the costs for manufacturing vehicle parts, supporting Purchasing in negotiations with suppliers, in a purchasing or cost of sales department.


### Energy economist

 Performs technical/economic feasibility studies for industrial projects and market research and monitoring in energy, engineering or industrial consulting firms.

### Trading assistance

 Works for oil or gas companies or banks, supporting trading operations by conducting economic, statistical and market analyses in a back-office department.

### Scheduling engineer for refineries

 In charge of optimized management of crude and oil product flows and stocks, in the Operations department of an oil refinery.

## FINANCEMENT & SPONSORING

### Typical class profile

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

### Main sponsors

Students in the Energy and Markets program have recently been sponsored by the following

companies (non-exhaustive list):

Airbus, Air Liquide, Alpiq Énergie France, Areva, Arkema, BP, Cepsa, CGG, Cofely Ineo, Crédit Agricole, Ecometering, EDF, Electrabel, Elengy, Énedis, Énergies Strasbourg, Engie, Esso saf, ExxonMobil, Greenyellow, Groupe PSA, GRT Gaz, IFPEN, Renault, RTE, Saipem, SEA, Spie, Storengy, Technip, Total, Vallourec.