



ENERGY AND MARKETS

APPLIED GRADUATE STUDIES

Language: **French**

Duration: **16 months**

Degree: **Master's degree/Specialized engineering degree**



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.

HIGHLIGHTS

- Knowledge through experience: a program that offers hands-on experience through apprenticeship
- Academic excellence: learn from a unique faculty that includes both experienced practitioners and highly respected academics
- A unique and interdisciplinary mix of courses (economics, finance, management, modeling, technology) entirely focused on energy applications

Energy, climate and economic issues are at the top of the public agenda and continually feed the debates related to the sustainability of our development models. With an unprecedented energy transition taking place, these issues give rise to challenges that will substantially impact the energy and transportation sectors.

To address them, companies have an ongoing need for talented professionals who understand the economic stakes, are able to take appropriate decisions and ensure they are implemented. This requires a deep understanding of industrial dynamics, and proven practical skills to analyze the issues and relate the results to business decisions. Given that need for highly qualified practitioners with proven skills in economics and financial analysis, this statement led to the creation of the Energy and Markets program.

By choosing the Energy and Markets program, you'll continue along the path you began with your scientific studies, broadening your expertise to include economics and finance. We provide the opportunity to acquire a cross-functional perspective on the energy and

transportation markets, giving you an in-depth understanding of the economic fundamentals and helping you master key management and financial tools.

To achieve this, the School has assembled a unique faculty that combines experienced practitioners and highly respected academic experts whose world-class research advance thinking in the energy sector.

Case studies, projects, work experience, and close ties with industry professionals - our entire instructional approach is focused on developing your operational skills. The curriculum provides you with an opportunity to acquire knowledge through experience thanks to the apprenticeship system. This proximity with the industry also financially contributes to your studies by covering your living expenses and your tuition fees.

The Energy and Markets program opens the door to a wide range of promising careers in a diverse set of sectors (gas, electricity, energy and CO₂ trading, oil, transport, consulting, corporate banking, oil equipment and services, etc.) and available positions (economic and financial analysis, technical-economic analysis, project management, etc.). By developing the ability to adapt to tomorrow's challenges, this transformational program will give your career the impetus needed to thrive and succeed.

CAREER OPPORTUNITIES

- 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



Find out more: www.ifp-school.com

TYPICAL CLASS PROFILE/ MAIN SPONSORS

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.

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.



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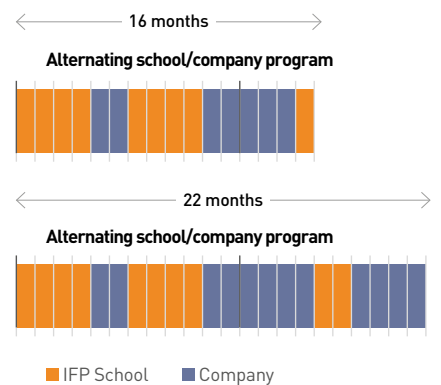
PROGRAM CONTENT

→ The program covers 6 main topics

<p>Economy: theory and applications</p> <ul style="list-style-type: none"> • Microeconomics and industrial economics • Macroeconomics and the economic environment • Economics of energy and the environment 	<p>Market finance</p> <ul style="list-style-type: none"> • Energy commodities and CO₂ markets • Risk management
<p>Energy and environmental management</p> <ul style="list-style-type: none"> • Energy geopolitics • Energy systems management (renewables, electricity, gasoline, natural gas, etc.) • Management of the energy transition 	<p>Quantitative techniques</p> <ul style="list-style-type: none"> • Massive data processing • Mathematical programming and applications in the energy sector • Econometrics
<p>Corporate finance</p> <ul style="list-style-type: none"> • Capital budgeting and investment modeling • Financial management • Cost control 	<p>Technology</p> <ul style="list-style-type: none"> • Extraction and processing of finite resources • Operation of the network industries (electricity and natural gas)

PROGRAM SCHEDULE

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 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.



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.