

EDITO

IFP School offers applied graduate programs. Since 1924, the year in which the *École Nationale Supérieure du Pétrole et des Combustibles Liquides* was born and of which IFP School is an offspring, it has managed to preserve the fundamental elements that have led to its specificity and success: its proximity to the industrial world. This specificity is now recognized officially: this summer, on the basis of the new system of reference for *specialized engineering education*, the *Commission des Titres de l'Ingénieur* (CTI) approved the renewal, for a maximum duration of 6 years, of IFP School's accreditation to award its engineering degree. It is true that the School's courses, which are both high quality and professionally-oriented, are in great demand by all interested parties, be it the public authorities, industry or the students themselves.

This newsletter widely features the subject of apprenticeship, which IFP School has been offering, particularly in its engineering programs, for almost 20 years. This term is still confusing for many. Apprenticeship is often considered to be for manual professions only or a way of giving a "second chance" to students reluctant to pursue theoretical studies. The reality, however, is quite different and our German neighbors, who introduced apprenticeship into their higher education system several years ago, have proved it to be so. For apprenticeship is, above all, a special educational approach giving professionally-oriented training with alternating periods of study and practical placements. My predecessors rapidly understood the benefits that such an approach could bring to the School, as it corresponds perfectly with the School's fundamental policy of offering applied graduate programs and is based on direct participation of companies in the students' training.

It should be mentioned that setting up apprenticeships required a complete revision of our courses, in order to ensure coherence and complementarity between the various training periods in the School and in the companies. Apprenticeships also require reinforced supervision of individual students and increased vigilance to make sure they acquire the necessary skills and knowledge. At the end of the day, everyone benefits from the system. The apprentices, thrust into the industrial world, gain a better understanding of corporate issues and organization. They are more motivated and acquire skills more rapidly and efficiently. The companies benefit by being able to recruit from a pool of young talent immediately operational and already trained to deal with issues that arise in their companies. Finally, the School reinforces its ties with industry, increases its appeal to the younger generation and benefits from complementary funding. In a nutshell – everyone wins.

Happy reading!

Philippe Pinchon
Dean
IFP School

BRIEF

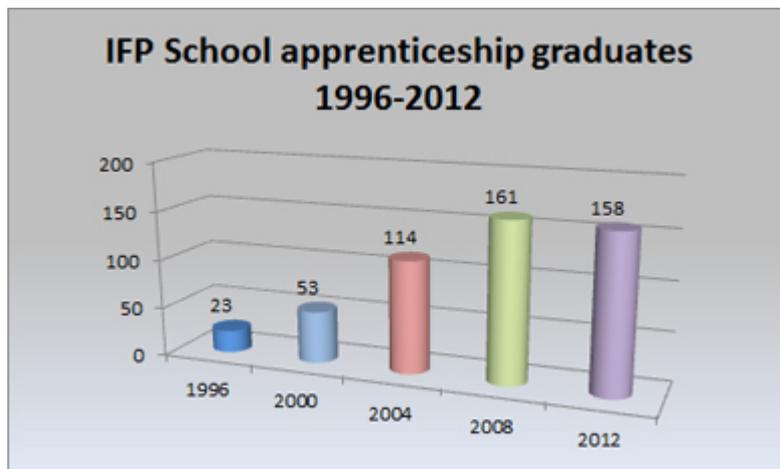
Apprenticeships at IFP School: training tuned to industry

The 2000th apprentice registered with the "CFA Énergie-Motorisations" (Energy and Powertrains Center for Apprenticeship Training) joined the School in the Class of 2013-2014.

Since August 1996, IFP School has accreditation to award its engineering degree to apprenticeship students. The School thus became one of the first engineering schools in France to implement this kind of training.

This educational approach is based on alternating periods of study in the School with placements in companies. Apprentices do part of their studies at IFP School and part in companies, following modules lasting several consecutive months.

Since its launch, the number of IFP School apprenticeship graduates has increased regularly, now averaging, since 2008, around 150 apprentices per year.



Of the ten IFP School programs that award the School's engineering degree, eight can be followed as an apprentice: Petroleum Geosciences (GOL/GOP), *Développement et exploitation des gisements* (DEG), *Énergie et procédés* (ENEP), Processes and Polymers (POLY), *Énergie et motorisations* (MOT), Powertrain Engineering (PWT), *Énergie et produits* (PRO) and *Énergie et marchés* (ENM). Overall, IFP School's annual intake is made up of 40 % of apprentices.

With the success of this kind of training, IFP School broadened its offer in 2011 to also make it possible to do the *Master Recherche Économie du Développement Durable, de l'Environnement et de l'Énergie* (EDDEE) as an apprentice.

Apprentices register with the *Centre de Formation d'Apprentis (CFA) Énergie-Motorisations*, who pass the students on to the engineering programs in IFP School.

Apprenticeship training at IFP School generally lasts 16 months. For students with four years of higher education ("Bac+4"), courses last 22 months and are part of an agreement with their engineering school or university. The training includes two or three placements, depending on whether the student is "Bac+5" (five years of higher education) or "Bac+4" (four years of higher education).

Selective recruitment

Apprentices are recruited jointly by the School and by the company.

As a first step, the company defines the openings for which it wishes to offer apprenticeship training and checks that they conform to the programs offered by the School.

IFP School interviews applicants, selects the profiles best suited to these openings and passes them on to the company.

The company chooses to meet a certain number of applicants and selects the ones that best correspond to the apprenticeship positions offered, taking into account the applicant's academic background, motivation and personal professional plan. This recruitment is often part of a pre-recruitment process which can include several interviews (recruitment agencies, interviews with operational staff and with a representative of the Human Resources Department).

Finally, these applicants are presented to the IFP School Admissions Board who decides whether to admit them to the School as apprentices registered with the *CFA Énergie-Motorisations*.

After this dual selection, applicants sign an apprenticeship agreement with the company who employ them as an apprentice. They are paid a salary (depending on age and educational background) throughout the entire training period (studies at the School and placements in the company).

High quality education

The School and the company share the responsibility of training. The apprentice has two supervisors, one from the School and one from the company.

Throughout the course, each apprentice is supervised by a tutor from the School. This tutor is a member of the School's faculty and follows the student's progress, both academic and professional. In the company, the apprentice works under the supervision of his/her corporate tutor, a professional from the company who defines, together with the academic tutor, the objectives of the placements in terms of skills specific to the field of specialization and also multi-disciplinary skills. The success of this type of training depends to a large extent on the supervision within the company and IFP School really appreciates the dedication of the company tutors and their commitment to helping the apprentice progress. IFP School has been running apprenticeships for over 20 years and often has the pleasure to work with corporate tutors who were themselves apprenticeship students of the School. This is a further guarantee of success.

The skills to be acquired by apprentices in the School and in the company have been carefully defined and are detailed in "specific course descriptions" ("parcours métiers") which describe the main types of professional pathways open to apprentices targeted by each program. These course descriptions list the skills to be acquired and the place in which they should be acquired (School or company).

"With this approach to skills acquisition, IFP School keeps abreast of the evolution of specific professions. The School ensures the complementarity of the training offered by the School and by the company," explained Jean-Philippe Cueille, Director of apprenticeship training at IFP School and Director of the *CFA Énergie-Motorisations*. "Apprenticeship training proposed jointly by the School and the company, is a teaching approach which is well adapted to a school offering applied graduate programs, situated between the student's initial engineering studies and the industrial world. Apprenticeship training is both the outcome and the success of the School's close ties with industrial partners."

The corporate tutor and the academic tutor assess the student's performance during placements from the point of view of skills acquired and the professionalism of the apprentice. Both tutors contribute to the overall evaluation for the awarding of the degree.

The high quality of the supervision is one of the main strengths of apprenticeship training at IFP School, but the role the apprentice plays in his/her own training is also one of its major assets.

"To be a successful apprentice at IFP School you need to be highly motivated and autonomous. Our apprentices are key players in their own training, both in the School and in the company," says Jean-Philippe Cueille. "Total commitment on the part of the apprentice is essential."

Advantages of apprenticeship training

For the apprentice, advantages are numerous. The complementarity of periods in the School and periods in a company enables him/her to acquire a wealth of skills, both job-specific and multi-disciplinary.

As an employee in the company, the apprentice is an integral member of the department he is working in and is considered as a newly hired member of staff, often even as a future colleague. In this capacity he can be called upon to undertake top level assignments which require autonomy and a sense of responsibility. Such assignments give the apprentice the opportunity to develop technical skills and also to implement the kind of behavior expected of an engineer.

On its side, the company invests time and money in the apprentice's training. Apprenticeships enable the company to train students in accordance with the specific needs of the profession and to develop the student's knowledge of the company's organization and culture. Taking part in a student's training is also an opportunity for the company to recruit young professionals who have been tried and tested.

Apprenticeship training is thus more and more popular with recruiters and is recognized as a valid professional experience. For the students, apprenticeship training is a major asset when seeking employment: two-thirds of IFP School apprentices are offered a position in the company at the end of their apprenticeship.

For the School, apprenticeship training has strengthened its partnerships with all companies in the energy and powertrains sectors. Each year, over 40 companies take part in apprenticeship training. These close ties with the companies enable IFP School to respond to the needs and evolution of the industrial world.

"Apprenticeships offer the perfect combination of specific job training and the development of multi-disciplinary skills. They fulfil the demands of recruiters who are seeking young graduates with professional experience!" says Jean-Philippe Cueille.

FOCUS

The 18th Class of apprentices at IFP School

The 18th Class of apprentices joined IFP School on 2 September 2013.

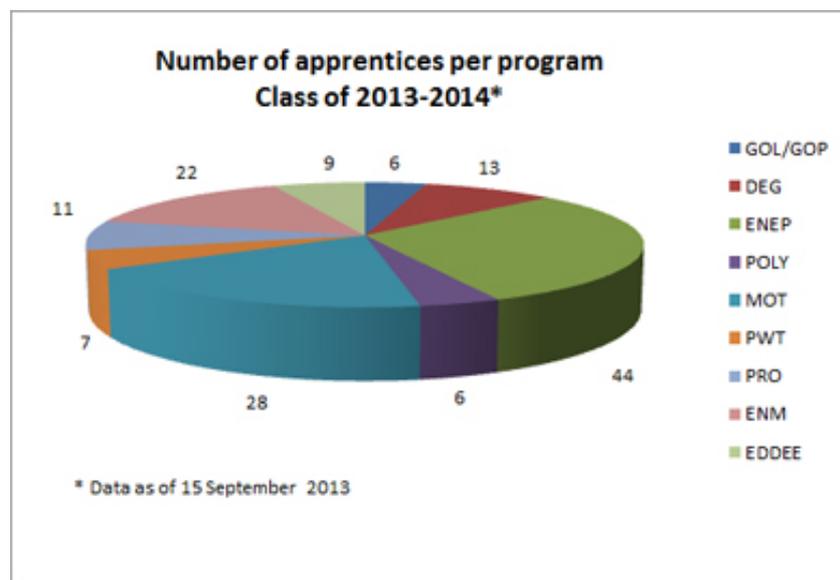
The class is made up of 146 apprentices, 137 of which are following one of the eight engineering programs open to apprenticeship students. The other 9 are following the *Master recherche Économie du Développement Durable, de l'Environnement et de l'Énergie* (EDDEE).

Of the 137 apprentices on the engineering programs, 31 are "Bac + 4" (four years of higher education).



146 new apprentices joined IFP School at the beginning of September.

In the engineering programs, there are many apprentices in the downstream, engines and economics courses. The *Énergie et procédés* (ENEP) program has the most apprentices (44). It is followed by *Énergie et motorisations* (MOT) with 28 apprentices and *Énergie et marchés* (ENM) which has 22.



The main companies who welcome the apprentices of the 18th Class are Total (13 apprentices), ExxonMobil (12), Technip (11), Renault (10), GDF Suez (8) and IFP Energies nouvelles (7).

During the Integration week, the School organized a meeting for the apprenticeship students. On this occasion, the 18th Class was welcomed by Jean- Philippe Cueille, Director of apprenticeship training at IFP School and Director of the *CFA Énergie-Motorisations*. He was accompanied by his assistant, Laurence Carotenuto, and Pierre Duclos, Secretary General of IFP School. The objective of the meeting was to present the organization and context of apprenticeship training at IFP School and to introduce the methods used to accompany students throughout their apprenticeships.

The Alumni Fund: support the development of IFP School and its students

In 2012, IFP School launched its first campaign to raise funds amongst its alumni. Philippe Pinchon, Dean of IFP School, spoke to us about the second fundraising phase.

1. In June 2012, with the support of the Tuck Foundation, you launched the annual Alumni Fund. What led you to make this decision?

This fund was created to raise funds from private sources amongst our former students. Donations are used at present to finance Excellence Scholarships given via the Tuck Foundation to international students admitted to IFP School.

The School is developing in an increasingly competitive international environment. In order to remain a world renowned reference for training in energy and powertrains, we need to attract the best talent. Excellence Scholarships through the Tuck Foundation enable us to do so, by offering the best possible material conditions for students to study in, allowing them to reach their full potential.

Support from former students through the Alumni Fund contributes towards our competitiveness, guarantees our development and opens up the path to success for our young engineers.

2. One year after the launch of the Alumni Fund, what are the results?

Despite the economic crisis, which also affects sponsoring, initial results are positive. Thanks to the generosity of our alumni, the Tuck Foundation has been able to finance the Alumni Fund's first three scholarships which have been awarded to international students of the 2012-2013 Class.

The mobilization of our graduates is the key of our success. We really appreciate their dynamism and commitment. Thanks to them, we now have a strong foundation to continue our efforts.

3. What is your objective for this second phase?

Our objective is to double the number of scholarships. So, this year, we hope to be able to finance the six scholarships which have been awarded to students who joined the School in September. The students are from India, Greece, Portugal, Spain and Russia.



This year, IFP School and the Tuck Foundation hope to be able to finance scholarships for these six students from the 2013-2014 Class.

4. What happens next?

We will shortly be sending a letter to our alumni to request their solidarity. We will also be out on the field trying to widen our pool of donators. We will meet up with former students and encourage them to make a contribution and to discuss their expectations with them.

Remember that making a donation to a foundation makes it possible to benefit from significant tax breaks for anyone paying income tax in France and in certain European countries.

In parallel, we will solicit new students via the Class Gift. The objective of this initiative, launched by the 2013-2014 Class, is to encourage students to make a donation in order to finance an Excellence Scholarship for a student who will join the School in September 2014. In this way we hope to instil the idea that all students can make a contribution whatever their means.

5. How can IFP School graduates donate to the Alumni Fund?

Graduates in France can return the donation form that will be sent to them by post mid-October.

Graduates can also send an on-line donation to the Alumni Fund (secured payment by credit card). To do so, log onto the [Alumni](#) site using your lifetime e-mail address, which is written: firstname.familyname.classyear@ifp-school.com. You can also arrange for a bank transfer (bank details available on the Alumni web site).

Donations should be made payable to the Tuck Foundation.

ASSOCIATION

Reminder: The Alumni Association Annual Dinner

The Alumni Association Annual Dinner will take place on Friday 13 December 2013 in the famous restaurant, *La Coupole*, Boulevard du Montparnasse in the 14th arrondissement in Paris.

Jean-Luc Volpi (APP 93), Directeur central du Service des Essences des Armées, will be our guest of honor. To attend this event, please register with [Dolorès Santos](#) (Tel. 01 47 52 52 51) before 22 November.



Drinks & Network

The next "Drinks & Network" event, organised by the Alumni Association, will take place on 19 November 2013 at the *Atelier Renault* on the Champs Élysées in the 8th arrondissement in Paris, in the presence of Jean-Baptiste Renard, President of the Association. These friendly gatherings aim to animate and strengthen the Alumni network.

Conference on the history of the automobile industry

The IFP School Alumni Association is organizing a conference at IFP School on the history of the automobile industry. It will take place on 16 October 2013 from 2pm to 4.30pm.

The conference will be given by Jean-Louis Loubet, professor of economic history at the *Université d'Evry-Val d'Essonne*, director of the *Laboratoire d'Histoire Économique, Sociale et des Techniques* (LHEST), researcher and author of numerous works on the history of the French automobile industry. Places are limited so please register with [Dolorès Santos](#) (Tel. 01 47 52 52 51) before 7 October. For further information on Alumni Association events check out the [Alumni web](#) site.

NEWS

Academic partnership between IFP School and ESIB

IFP School and the *École Supérieure d'Ingénieurs de Beyrouth* (ESIB) of the *Université Saint-Joseph* (USJ) signed an agreement last August for academic cooperation to create a professional Master's program in "Oil and Gas" (MOPG).

The aim of this Master is to give students the technical and economic knowledge and skills needed to work in the oil and gas industry. It will take place over four semesters and will be given entirely in English on the Mar Roukos Science and Technology Campus in Lebanon.

The course will be organized and run by ESIB. IFP School will participate with eight teaching units. Students will be awarded a USJ Master's degree at the end of the course.

IFP School SPE Student Chapter wins a Society of Petroleum Engineers award

The IFP School SPE Student Chapter was awarded the "2013 Gold Student Chapter for Europe" by the Society of Petroleum Engineers (SPE) in recognition of its dynamism.

The IFP School SPE Student Chapter is the oldest chapter of the SPE in France. Its aim is to promote exchange of technical knowledge amongst students through conferences and meetings with professionals from the energy sector.

Run by students from the *Développement et exploitation des gisements* and Reservoir Geoscience and Engineering programs, the IFP School SPE Student Chapter organized several conferences at the School and a study trip to Malaysia and Singapore.

The new 2013-2014 Class

IFP School welcomed the 323 students of the 2014 Class with a new Integration week formula. Students were invited to follow a discovery trail throughout the week of 2 to 6 September 2013, giving them information on IFP School and the town of Rueil-Malmaison.

There were three main events during this Integration week. The week began on Monday morning with a welcome speech by Philippe Pinchon, Dean of IFP School. There was also a scavenger hunt in Rueil-Malmaison, organized in collaboration with the town council and with the help of the Tourist Office and the team who welcomes newcomers to the town. The week ended Friday with a fun and sports challenge in the grounds of the Château de Vert-Mont. Watch the [report](#) on this week on Rueil-TV.



IFP School will soon have a brand new web site

IFP School will launch its new web site within the next few weeks.

More practical and modern, the new site will benefit from the latest technology and will be adapted for use with digital devices (smartphones, tablets, etc.).