



Commission
des titres d'ingénieur

CTI & the French engineering degree

CTI

The *Commission des titres d'ingénieur* (CTI) was established by Law in 1934 (French Education Code, Article L.642-2 and following). In France, the CTI is the relevant body in charge of carrying out evaluation procedures that lead to the accreditation of the institutions to award the engineering degree “*titre d'ingénieur diplômé*”.

Organisational Structure

A distinctive feature of the CTI is that its members consist of an equal number of representatives from academia (16 members) and from industry (16 members). These members are appointed by the Minister in charge of Higher Education for a four-year term, renewable once. They act on a voluntary basis and are involved in all areas of the organisation's life, such as drawing up reference documents for engineering programmes, performing expert assessments, discussing and voting on the outcomes of the accreditation procedures, and representing the CTI to other stakeholders.

In addition, around 100 experts provide assistance in areas of their proficiency, such as science, education, international affairs and quality assurance. These experts - as well as student experts - take an active part in the accreditation procedures.

The CTI has also appointed a dozen special advisors to manage or participate in certain projects that require specific expertise.

A permanent staff team is responsible for day-to-day management and supporting the CTI's governance.

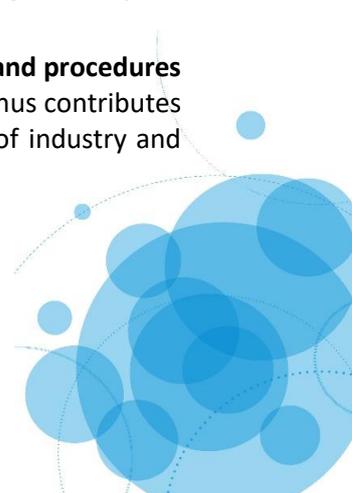
Registry services are provided by the *General Directorate for Higher Education* within the Ministry of Higher Education.

The CTI is an independent body, responsible for managing its own finances. Its administrative operator is a partner association, the *Conférence des directeurs des écoles françaises d'ingénieurs* (CDEFI).

Missions

The various missions of the CTI have evolved over the years, and currently include:

1. Periodic **evaluation** of all **engineering programmes** offered by **French higher education institutions** across the country, that leads to the **accreditation** of the institutions to award the **engineering degree**. The CTI is responsible for accreditation decisions for private institutions and those run by Chambers of Commerce; it issues recommendations to the relevant ministries for public owned higher education institutions. On request and subject to the support of the relevant authorities in the host countries, the CTI can also carry out evaluation procedures of engineering programmes provided by French institutions abroad, in order to extend the accreditation to the foreign site.
2. On request of the institutions and relevant governments, **evaluation of engineering programmes** run by **foreign higher education institutions**. The positive outcome of a CTI procedure may lead to the **recognition** of these degrees within France (“**Admission par l'Etat**”). This recognition is granted by the French Ministry of Higher Education.
3. Defining the **generic profile of the engineer** at master's level and drawing up **criteria and procedures** for awarding the engineering degree and for carrying out the CTI's missions. The CTI thus contributes to the **continuing development of engineering education**, adapting it to the needs of industry and society as a whole.
4. Issuing **opinions on all topics regarding the French engineering education**.



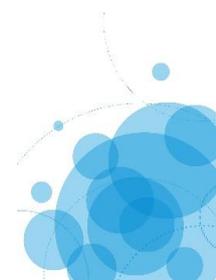
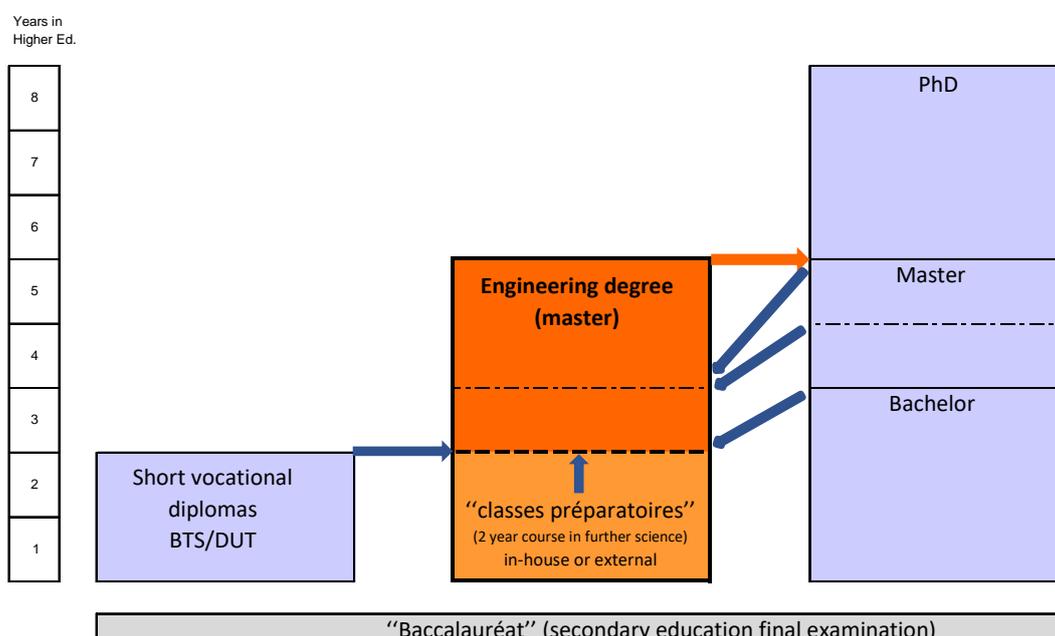
These “historical” missions have been extended with the increasing internationalisation of higher education and with the establishment of the European Higher Education Area, in which the CTI plays a role in its areas of proficiency (engineering education and quality assurance). Thanks to its recognition by bodies such as the *European Association for Quality Assurance in Higher Education* (ENQA) or the *European Quality Assurance Register* (EQAR), the CTI has become the main player in implementing the Bologna Process within French engineering schools.

5. **Developing a quality assurance culture** within French engineering schools and the CTI itself, in line with the ***Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)*** adopted by the Ministers of Higher Education of the European Higher Education Area. In this context, the CTI cooperates with other French and international quality assurance agencies, either under bilateral agreements (for example with ABET, AEQES, AAQ, Hcéres, IEAQA and others) or in networks such as FraQ-Sup, ECA and ENAEE.
6. Any actions to promote the **academic and professional recognition of the French engineering degree**. Since the engineering profession is not regulated in France and there is no institution of chartered engineers, the CTI is the natural point of contact for foreign engineering bodies (often in coordination with IESF, *Ingénieurs et Scientifiques de France*). The CTI is a member of various European and international networks and associations, and in this capacity has signed co-operation and mutual recognition agreements with other quality assurance agencies.
7. Evaluation of French and foreign engineering programmes in order to award **quality labels**. The CTI is a founding member of the *European Network for Accreditation of Engineering Education* (ENAEE) and is authorized to award its European quality label for engineering degree programmes EUR-ACE® (master’s level). The CTI is also a member of the *European Consortium for Accreditation* (ECA) and is involved in awarding its *Certificate for Quality in Internationalisation* (CeQuInt). With its French and Chinese partner organisations (*Haut Conseil de l’évaluation de la recherche et de l’enseignement supérieur* (Hcéres) and *China Education Association for International Exchange – CEAIE*) CTI is currently setting up a quality label for Chinese-French Institutes, jointly awarded by the three agencies.



The engineering degree

Engineering education in French higher education



The engineering degree

The engineering profession is not regulated in France but the “titre d’ingénieur diplômé” is protected by law and considered in employment-related negotiations.

Under Decree no. 99-747 of 30 August 1999 (as amended by Decree no. 2002-480 of 8 April 2002), the French engineering degree confers the academic grade of **master** and enables the graduates’ direct access to doctoral studies.

The engineering degree is listed at level 1 (highest) of the French National Qualifications Framework and at level 7 of the European Qualifications Framework.

In order to be accredited to award the engineering degree, an institution must comply with the CTI’s standards and guidelines (*Références et Orientations*). The engineering programme must fulfil a set of minimum requirements, namely:

- ★ the degree is awarded upon successful completion of at least 10 semesters of studies in higher education and a total student workload of 300 European credits (ECTS)
- ★ admission to the programme is based on strict criteria and a structured procedure (entrance exam or parallel admission procedure for holders of prior qualifications)
- ★ the programme includes:
 - a solid core science programme to promote analytical capabilities and the capacity for long-term knowledge acquisition,
 - an introduction to research and innovation to develop open-mindedness and creativity,
 - a structured contact with industry, particularly as regards internships and the participation of professionals in the teaching and the programme governance,
 - an international dimension (command of other languages, studies or internships abroad, incoming mobility, etc.),
 - a good foundation in humanities and social sciences in order to guarantee that the graduates take into account socio-cultural issues such as sustainable development, ethics, workplace organisation, health & safety, etc.
 - a varied range of teaching methods and a robust internal quality assurance system.

Engineering schools

In France, most engineering programmes are offered by specific higher education institutions called “Grande école d’ingénieurs”. These engineering schools may be run by the public or private sector, may or may not be part of a university, and may come under different ministries (Higher Education, Research and Innovation; Agriculture; Economy; Defence; Ecology and Sustainable Development) or a local authority.

Engineering schools in figures:

- ★ 205 engineering schools (54 private)
- ★ 551 programmes and 983 curricula
- ★ 163,000 engineering students
 - 35% beneficiaries of income based scholarships
- ★ 38,000 graduates per year
 - 28% women
 - 13% foreign nationals
 - 14% through an apprenticeship track
 - 3% via continuing education
 - 0.4% through validation of informal or non-formal learning (VAE)
- ★ 79% of engineering graduates find a first job in less than 2 months

For further information



44 rue Cambronne – 75015 Paris – France

☎ + 33 (0) 1 73 04 34 30

@ contact@cti-commission.fr

🌐 www.cti-commission.fr

