Cti

Commission
des titres d'ingénieur

Accreditation Criteria,
Guidelines and Procedures
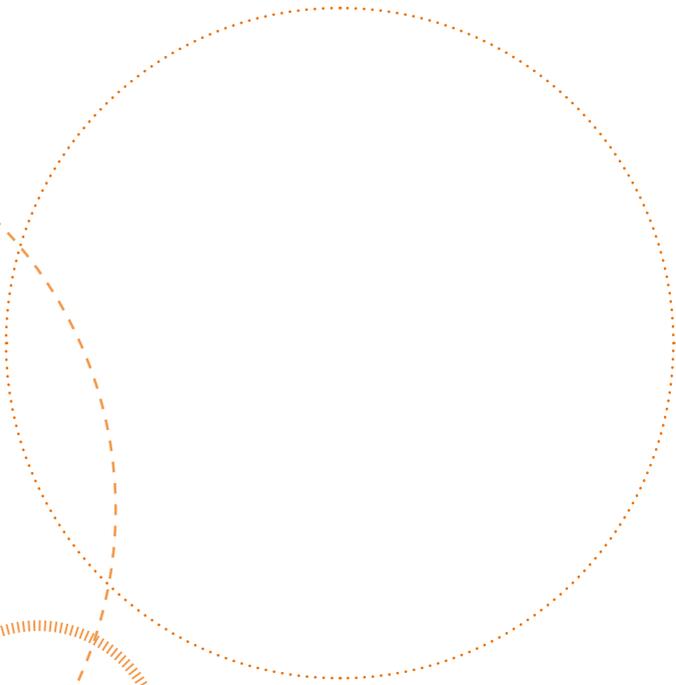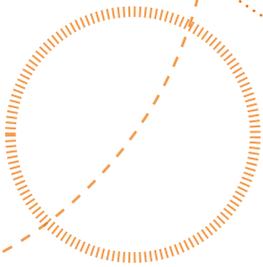
INTRODUCTION

The *Commission des titres d'ingénieur (CTI)* was established under French law in 1934 and was one of the first higher education quality assurance organisations in Europe.

Today, CTI is an active player within the *European Higher Education Area;* it has been a full member of ENQA *(European Association for Quality Assurance in Higher Education)* since 2005 and registered on EQAR *(European Quality Assurance Register)* since 2010. CTI is also a founding member of ENAEE *(European Network for Accreditation of Engineering Education)* and is one of the agencies authorised to award the EUR-ACE® label (a European quality label for engineering programmes, developed by ENAEE). CTI also participates in the work of ECA *(European Consortium for Accreditation)* and belongs to its member agencies which are authorized to award the European *Certificate for quality in internationalisation* (CeQuInt) that evaluates internationalisation at institutional and/or programme level.

Since 1997, all French engineering degree programmes must undergo a periodical accreditation procedure by CTI. Following a successful procedure, engineering Higher Education Institutions (hereafter called HEI or institutions) are accredited by CTI (private HEIs) or by the relevant French ministry (public owned HEIs) to offer engineering degree programmes and to award successful students the *"diplôme d'ingénieur"* (master's level), that gives access to the engineering profession and to doctoral studies in France.

CTI is authorized by French law to carry out accreditation procedures for engineering programmes abroad. Upon request from the government and institution concerned, and following a successful accreditation procedure, the French government may grant official recognition of the foreign degree in France *("Admission par l'Etat").*

CTI is also entitled to award the European EUR-ACE® label to engineering programmes abroad.

The two procedures (recognition of the degree in France and EUR-ACE® label) may be carried out jointly or separately.

CTI has performed accreditation procedures in Belgium, Bulgaria, Burkina Faso, Cameroon, China, Lebanon, Morocco, Spain, Switzerland, Tunisia and Vietnam.

In order to fulfil its missions, CTI co-operates actively with major players in higher education, quality assurance, international relations and the engineering profession at national and international level. This collaborative work may involve membership of the same networks, bilateral agreements or simply exchange of information (with authorities, embassies, ministries, industry, HEI, etc.).

In France, CTI works closely with the Ministry in charge of Higher Education ; and the French High Council for Evaluation of Research and Higher Education (Hcéres) as well as with various engineering associations such as the *Conférence des directeurs des écoles françaises d'ingénieurs* (CDEFI), *Bureau national des élèves ingénieurs* (BNEI) and *Ingénieurs et scientifiques de France* (IESF).

At the European and international level, CTI is a co-founder of the network of francophone quality assurance agencies, FrAQ-Sup, and operates numerous bilateral exchanges, for instance with: *Agence universitaire de la francophonie* (AUF), *Agence pour l'évaluation de la qualité de l'enseignement supérieur* (AEQES, Belgium), *China education association for international exchange* (CEAIE, China), *Agence suisse d'accréditation et d'assurance qualité* (AAQ, Switzerland), *Instance nationale de l'évaluation, de l'assurance-qualité et de l'accréditation* (IEAQA, Tunisia), *Accreditation board for engineering and technology* (ABET, USA); *Engineers Canada-Ingénieurs Canada,* etc.

This *Accreditation Criteria, Guidelines and Procedures* document is primarily aimed at Higher Education Institutions outside of France wishing to obtain accreditation for their engineering degree programmes at master's level through a quality assurance procedure by CTI. It contains the standards and guidelines for accreditation procedures by CTI. It also provides guidance for

the preparation of the self-evaluation report and the site visit. It is the fruit of CTI's experience since 1934, and takes into account the latest developments in quality assurance at national, European and international level. This new edition was updated in 2016 and complies with the 2015 version of the *Standards and guidelines for quality assurance in the European higher education area* (ESG) and the 2015 version of the *EUR-ACE® framework standards and guidelines* (EAFSG). It is designed as a framework within which Engineering schools can develop their own initiatives and innovations.

At engineering education level, the developing needs and changes in society mean that the profile of the engineer of the 21st century to be promoted by CTI needs to be continually reviewed. This has led CTI to expand its criteria in areas such as innovation and entrepreneurship, internationalisation, research, health and safety issues, sustainable development and social responsibility.

In our ever-changing world, CTI intends to inspire HEIs to train tomorrow's engineers for the long term and to support students in preparing for the future, understanding the global stakes and having the ability to evolve and learn throughout their professional and personal life.

Laurent Mahieu,
CTI's President

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GLOSSARY

This glossary gives the definitions of the main keywords used in this document. Definitions are taken from the IEA/ENAEE glossary (www.enaee.eu) and from references therein (TREE, EUGENE).

ACCREDITATION

Both recognition given to a programme as meeting applicable criteria as a result of an evaluation process and the process itself.

ACCREDITATION CRITERIA

The full set of factors that are considered by an agency in evaluating the quality of a programme. Accreditation criteria include standards, that is, statements of assessable attributes to be displayed by graduates that indicate that the purpose of the programme has been achieved.

ACCREDITATION PROCESS

Process which embraces all phases: preparation for evaluation, the evaluation visit, reporting, decision-making, publication of the decision and follow-up, if required.

BRANCH [OF ENGINEERING]

A major subdivision of engineering, such as Chemical, Civil, Mechanical or Electrical Engineering. Engineering in its totality is termed a discipline. Within a branch of engineering, there are specialisations, e.g. hydraulic engineering. A student focuses on a field of study, which can include topics from different branches or specialisations.

ENGINEERING DESIGN

The systematic process of designing and developing materials, components, systems and processes to serve useful purposes. Design may be procedural, creative or open-ended and requires application of engineering sciences, working under constraints, and taking into account economic, health and safety, social and environmental factors, codes of practice and applicable laws.

ENGINEERING PRACTICE

A generally accepted or legally defined area of engineering work or engineering technology.

ENGINEERING SPECIALITY OR SPECIALISATION

A generally-recognised area of practice or major subdivision within an engineering discipline, for example Structural and Geotechnical Engineering within Civil Engineering; the extension of engineering fundamentals to create theoretical frameworks and bodies of knowledge for areas of engineering practice.

HIGHER EDUCATION INSTITUTION (HEI)

Institution providing tertiary education and awarding academic degrees. Includes traditional universities and profession-oriented institutions.

KNOWLEDGE

The outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, concepts, theories and practices that is related to a field of study, work or everyday life.

LEARNING OUTCOMES

Statements of what a learner knows, understands and is able to do on completion of a learning process. Usually defined in terms of knowledge, skills and/or competencies. May be specified by learning outcomes indicators for assessment purposes.

LIFELONG LEARNING

All learning activities undertaken throughout life, with the aim of improving knowledge, skills and competencies.

PATHWAY

A prescribed / defined arrangement of teaching, learning and assessment within a programme characterised by distinctive providers, sites or learning modes.

PROGRAMME [OF STUDY]

A curriculum recognised as higher education, the completion of which provides the student with a higher education qualification. Has a set of learning outcomes and is composed of compulsory and optional course units/modules which lead to the achievement of a pre-determined set of learning outcomes.

PROGRAMME OUTCOMES

General statements of requirements under the ENAEE framework for an agency's conditions for programme accreditation.

RESPONSIBILITIES OF ENGINEERING PRACTICE

Include: social responsibilities, ethics, health and safety and other legislation; cultural responsibilities; environmental responsibilities, including sustainable development and design and legislative responsibilities.

(ENGINEERING) SCHOOL

Higher Education Institution (HEI) or department of a HEI which manages and delivers engineering programmes.

SELF-EVALUATION REPORT

A quantitative and qualitative account prepared by an education provider in advance of the on-site evaluation of a programme addressing the extent to which the programme meets applicable accreditation standards, criteria and covering all methods of programme delivery and all possible pathways to award of the qualification.

SKILLS

The ability to apply knowledge to complete tasks and solve problems. Skills can be described as cognitive (use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).

SOCIETAL CONTEXT [OF ENGINEERING]

The aspects of society that are potentially or actually affected by any stage of the lifecycle of an engineering activity, both in a positive and negative way that must therefore be taken into account.

TRANSFERABLE SKILLS/SOFT SKILLS

Skills acquired in one context that, with adaptation, may be applied in another context.

UNDERSTANDING

The capacity for rational thought or inference or discrimination.

Accreditation of engineering programmes by CTI: General principles

1. ACCREDITATION OF ENGINEERING PROGRAMMES BY CTI: GENERAL PRINCIPLES

1. A. MISSION, STATUS AND STRUCTURE OF CTI

The *Commission des titres d'ingénieur* (CTI) is a quality assurance organisation established by French law in 1934. CTI is de jure and de facto the cornerstone of engineering programme accreditation in France.

The various missions of 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, leading to the **accreditation** of institutions to award **engineering degrees.** 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 host countries, CTI can also carry out evaluation procedures of engineering programmes provided by French institutions abroad, in order to extend accreditation to the foreign site.

2. **Evaluation of engineering programmes run by foreign Higher Education Institutions** on request of the institutions and relevant governments. 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 in charge of Higher Education.

3. Defining the **generic profile of engineers** at master's level and drawing up **criteria and procedures** for awarding engineering degrees and for carrying out CTI's missions. CTI thus contributes to the **contin-**

uing development of engineering education, adapting it to the needs of industry and society as a whole.

4. Issuing **opinions on all topics regarding 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 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),** 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 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, 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, CTI is the natural point of contact for foreign engineering bodies (often in coordination with **IESF, Ingénieurs et Scientifiques de France).** 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.** CTI is a founding member of the **European Network for Accreditation of Engineering Education (ENAEE)** and is authorised to award its **EUR-ACE®** European quality label for engineer-

ing degree programmes (master's level). 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 **(French High Council for Evaluation of Research and Higher Education (Hcéres)** and **China Education Association for International Exchange – CEAIE)** CTI is currently setting up a quality label for Chinese-French Institutes, awarded jointly by the three agencies.

8. The publication of position statements on any issues related to engineering degree programmes. In particular, CTI sets the criteria and procedures for the accreditation of engineering degree programmes and contributes to their continuous improvement, in a European and international context.

CTI does not award engineering degrees to individuals. Neither is the ranking of Higher Education Institutions or engineering schools part of its mission.

CTI's plenary assembly is composed of equal numbers of both socio-economic and academic representatives. This composition brings together individuals from engineering education, the professional and corporate world, top labour organisations and engineering associations as well as field experts.

CTI accreditation activities are carried out using an extensive network of national and international experts as well as CTI members.

The audit panels are usually composed of two plenary session members and three experts (field, international and engineering student).

The names and affiliations of CTI members and experts are periodically published on its web page:

https://www.cti-commission.fr/la-cti/organisation/lassemblee-pleniere

https://www.cti-commission.fr/la-cti/organisation/les-experts-par-categorie

1. B. WHY APPLY FOR CTI ACCREDITATION?

EVALUATION AND ACCREDITATION EXPERTISE IN THE FIELD OF ENGI-NEERING EDUCATION

CTI provides specific evaluation and accreditation expertise in the field of engineering education and is currently active in many countries in Europe and beyond (more than 130 programmes accredited outside France in 2016).

CTI accreditation standards are the fruit of its experience since its establishment in 1934. These standards have proven to be a consistent tool for guiding the development and improvement of engineering programmes at master's level. At the same time, they provide a flexible framework within which Higher Education Institutions (HEIs) of differing types can develop their own strategies and innovations.

CTI accreditation is recognized at national, European and international level. CTI has signed the EUR-ACE® accord (2013) in which 14 European accreditation agencies mutually recognise their accreditation decisions.

NATIONAL RECOGNITION OF CTI ACCREDITATION: ADMISSION OF ENGI-NEERING DEGREES BY THE FRENCH MINISTRY IN CHARGE OF HIGHER EDUCATION (ADMISSION PAR L'ETAT).

Upon receipt of a supporting letter from the government of the requesting country, the French Ministry in charge of Higher Education may grant *Admission par l'Etat* status to foreign engineering degree programmes accredited by CTI.

Admission par l'Etat for a foreign degree allows the degree-holder the right to use the *Titre d'ingénieur diplomé* (graduate engineering title) in France. These engineers can then benefit from full engineer status in France.

The list of programmes awarding the *Titre d'ingénieur diplomé* is published every year in the *Journal Officiel de la République Française* (France's Official Journal). It is available on CTI's website and all accredited programmes can be found via our search engine **https://www.cti-commission.fr/accreditation**

**EUROPEAN RECOGNITION OF CTI ACCREDITATION: THE EUR-ACE®
LABEL — EUROPEAN SYSTEM FOR ACCREDITATION OF ENGINEERING
EDUCATION (EUR-ACE®)**

EUR-ACE® is the European quality label for engineering degree programmes
at first cycle (bachelor's) and second cycle (master's).

The EUR-ACE® system encompasses all engineering branches and pro-
files, is internationally recognized, and facilitates both academic and
professional mobility.

CTI is a founding member of this system and is now one of the 14 accredi-
tation agencies (2016) entitled to deliver the EUR-ACE® label to second
cycle (master's) engineering programmes.

Upon request from the HEI concerned, CTI can award the EUR-ACE® label
to programmes which fulfil EUR-ACE® criteria **(EAFSG, EUR-ACE®
Accreditation Framework Standards and Guidelines, 2015)** available at
http://www.enaee.eu/

In the case of a EUR-ACE® label attribution procedure with no CTI accredi-
tation, the procedure will be based only on this document.

1. C. WHO CAN APPLY FOR CTI ACCREDITATION? ADMISSIBILITY CRITERIA

CTI's scope is master's level engineering degree programmes (level 7 in the
European Qualifications Framework). These programmes may include an
intermediate bachelor's programme with no professional orientation.

CTI can accredit programmes with different structures (integrated pro-
grammes, master's or second cycle programmes). In any case, CTI considers
that the whole engineering higher education cycle (bachelor's plus master's)
should have a minimum duration of 10 semesters (300 ECTS).

CTI can accredit programmes whose main language of delivery is either
French or English. However, as English is currently acknowledged as the
global working language, a good command of English by graduates is

expected. In the case of programmes aiming at *Admission par l'Etat,* graduates should also demonstrate a good command of French.

Engineering programmes requesting CTI accreditation should be consistent with CTI's definition of the engineering profession and criteria for an engineering degree programme.

International accreditation can only be granted to existing programmes which are already fully set up: the programmes should have already graduated students, or at least, the first students must have reached the last year of teaching. International accreditation cannot be delivered to programme projects.

CTI cannot accredit engineering programmes which have recently obtained a negative accreditation decision by any accreditation body operating in the country of origin of the applicant HEI (ministry, accreditation agency, engineering professional body, etc.)

In any case, when performing accreditation missions outside France, CTI always proceeds with the agreement of the relevant national authorities (ministry of higher education, etc.) and in coordination with its national counterparts (national agencies, accreditation bodies, etc.).

1. D. THE ENGINEERING PROFESSION

The engineering "umbrella" covers several professions, and CTI has adopted the following overall definition of engineering:

Engineering can be defined as the posing and answering of complex questions in an effective and innovative way, in the fields of creation, design, production and implementation, within a competitive environment and with a focus on products, systems or services, and possibly their financing and sale. As such, engineers should have a good understanding of technical, economic, social and human issues, based upon a solid scientific background.

Engineering fields are increasingly broader and may overlap several disciplines. Engineers primarily work in the manufacturing industry, construction

and public works, agriculture and services. In order to ensure clear national and international understanding, CTI advises engineering HEIs to refer to French official glossaries, such as the one proposed by the **National Register of Professional Certifications (RNCP),** as well as to the classification of engineering branches developed at an international level (such as the **IEA/ENAEE Glossary,** or the **OECD list of engineering branches).**

The *Titre d'ingénieur diplomé* is both academic and professional. It attests academic knowledge, and professional skills. As a master's degree, the title is fully integrated into the European Higher Education Area (EHEA) and facilitates international professional mobility. In France, holders of a *Titre d'ingénieur diplomé* are immediately entitled to practice engineering professionally.

1. E. CTI PROGRAMME OUTCOMES FRAMEWORK

CTI criteria and procedures comply with institutional autonomy and diversity. Nevertheless, all graduates from CTI accredited programmes should be able to demonstrate the following knowledges, skills and abilities (listed in no order of importance):

A – SCIENTIFIC AND TECHNICAL KNOWLEDGE

A strong and broad basis in fundamental sciences is essential to ensuring analytical competence and the capacity for long-term adjustment to demanding changes in engineering and management activities.

Graduates should also be able to adapt effectively to professional activity within a branch of engineering in a relatively short period of time. To this end, the programme should provide the necessary understanding of engineering knowledge and tools as well as the required practical skills.

1. Knowledge and understanding of a broad field of basic and applied sciences; the capacity for analysis and synthesis of information associated with them

2. Ability to mobilise resources from a specific scientific and technical field

3. Command of engineering methods and tools: identification, modelling and resolution of even unfamiliar and incompletely defined problems, use of computer tools, analysis and design of systems

4. Ability to design, implement, test and validate innovative solutions, methods, products, systems and services

Engineering graduates should have the appropriate preparation and competencies so as to be able to incorporate a research and innovation dimension into their engineering work. Graduates should be able to carry out doctoral studies after finishing the programme.

5. Ability to carry out fundamental or applied research activities, to set up experimental devices, to open up to the practice of collaborative work

6. Ability to find, evaluate and exploit relevant information: information literacy

B – ADAPTATION TO THE SPECIFIC REQUIREMENTS OF THE COMPANY AND SOCIETY:

Together with a sound scientific and technical cultural approach, engineering graduates should have an understanding of business culture; they should also be aware of economic, social, ethical and environmental challenges.

7. Ability to take into account the company's challenges: financial dimension, respect for quality, competitiveness and productivity, business requirements, economic intelligence

8. Ability to take into account the issues of workplace relations, ethics, responsibility, safety and health at work

9. Ability to take environmental issues into account, in particular by applying the principles of sustainable development

10. Ability to take into account the issues and needs of society

C - TAKING INTO ACCOUNT THE ORGANISATIONAL, PERSONAL AND CULTURAL DIMENSION:

Engineering graduates should be able to communicate effectively in a professional context at national and international levels. Graduates should have the capacity to work in multidisciplinary and international contexts. Graduates should recognise the need for, and have the ability to engage in, independent, life-long learning.

11. Ability to integrate into professional life, to integrate into an organisation, to coordinate and develop it: exercise of responsibility, team spirit, commitment and leadership, project management, work control, communication with specialists and non-specialists

12. Ability to undertake and innovate, through personal projects or initiative and involvement in entrepreneurial projects within the company

13. Ability to work in an international context: mastery of one or more foreign languages and associated cultural openness, ability to adapt to international contexts

14. Ability to know oneself, to self-assess, to manage one's competencies (especially as part of lifelong learning), to make professional choices

CTI programme outcomes are fully compliant with the **European Qualification Framework** (Level 7) and the **EUR-ACE® Framework.**
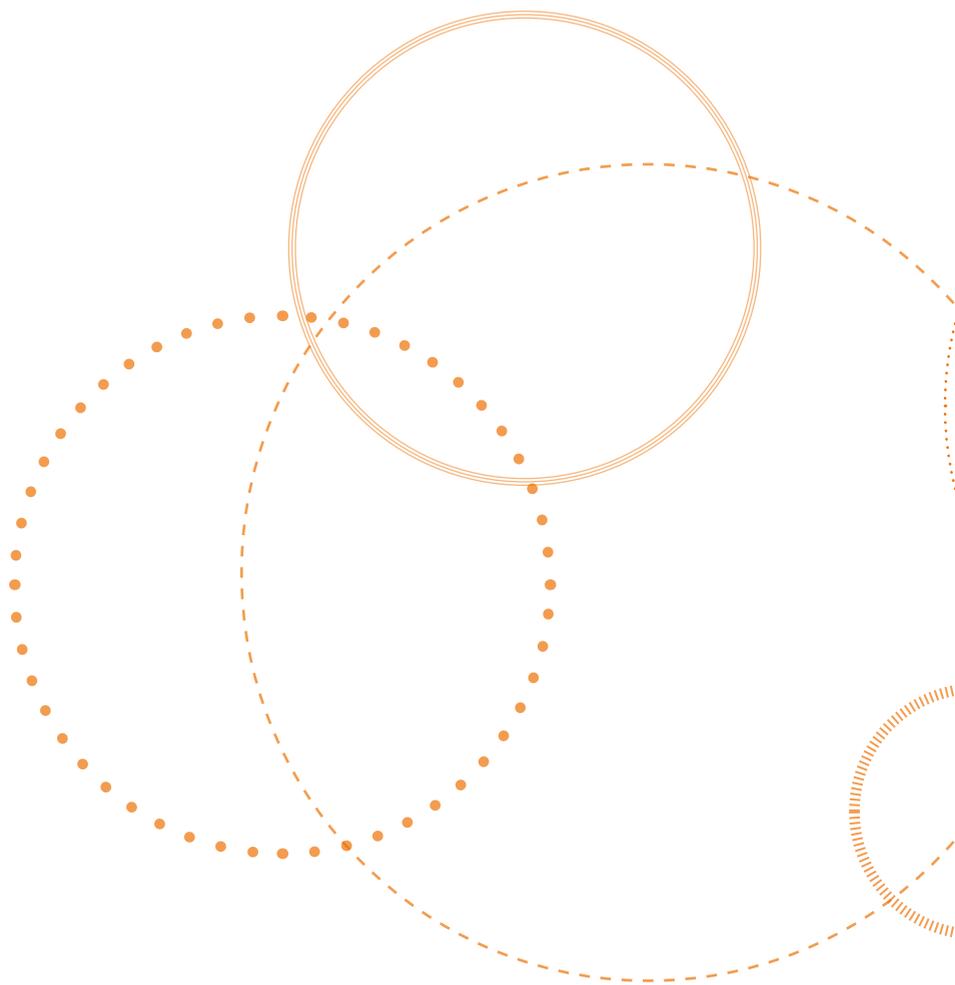
Standards for the accreditation of engineering programmes [within applicant HEIs]

2. STANDARDS FOR THE ACCREDITATION OF ENGINEERING PROGRAMMES [WITHIN APPLICANT HEIS]

These evaluation criteria have been developed by CTI in connection with engineering education stakeholders. They are based on CTI's long experience in accreditation and incorporate recent national and international professional and academic developments, as well as the new needs of engineering students.

These criteria are obviously centred on training (the programme), but also on the elements that contribute to its quality and sustainability. Institutional governance and management are therefore concerned, since they can be related to the difficulties met in defective programmes.

These criteria are consistent with and complementary to the European quality requirements for higher education **(ESG 2015)** *and to the EUR-ACE® standards for engineering education* **(EAFSG 2015).** *They take into account the specificities of engineering studies, and particularly their pre-professional character.*

THE ACCREDITATION FRAMEWORK

The school must meet the following major requirements, organised into 6 sections:

* 2. A. MISSION AND ORGANISATION OF THE ENGINEERING SCHOOL

* 2. B. EXTERNAL LINKS AND PARTNERSHIPS

* 2. C. TRAINING PROGRAMME AND PROCESS

* 2. D. STUDENT SELECTION AND ADMISSION

* 2. E. GRADUATE EMPLOYMENT

* 2. F. QUALITY ASSURANCE

These sections and their first-level subsections (e.g. 2.C.3. Programme content and outcomes at programme level) constitute the fixed architecture (numbering and headings) of all the documents used in the accreditation process: self-evaluation report, mission reports, decision reports. The framework may be adapted to the national context, while maintaining its rationale and consistency.

2. A. MISSION AND ORGANISATION OF THE ENGINEERING SCHOOL

2. A.1. STRATEGY AND IDENTITY

2. A.1.1. IDENTITY

The school has an effective identity and visible location; an organisational structure that is clearly defined in statutory texts allows it to perform its engineering education missions in good conditions.

2. A.1.2. POLICY

The school has an overall policy regarding the status and role of engineering education and of the programme(s) to be accredited in the institution. If the school is a component of an institution, this guidance is consistent with the institution's policy. This policy is published.

2. A.1.3. AUTONOMY

The school has genuine autonomy (statutory or in a clear framework of delegation) regarding the choice of its teaching objectives and methods and development of its organisation; it has the sustainable material and human resources necessary for the achievement of its mission.

2. A.2. TRAINING POLICY

The institution has a comprehensive policy for training engineers which is clear, diversified and adapted to needs; it is consistent with and complementary to the institution's overall training offer.

The school contributes to the dissemination of scientific and technical knowledge to businesses and society; it contributes to the dissemination of information on engineering professions and training for primary and secondary schools.

2. A.3. ORGANISATIONAL STRUCTURE AND MANAGEMENT

The school has a suitable organisational structure for training engineers.

2. A.3.1. DECISION AND CONSULTATION BODIES

Decision and consultation bodies ensure the proper representation of stakeholders in engineering training, in particular employers, teachers and students in the school's governing bodies.

2. A.3.2. GOVERNANCE

The management of the engineering school is governed by a strong and efficient team; its position within the Higher Education Institution is secure enough to ensure that the objectives of the programme are achieved.

2. A.3.3. ORGANISATION

The management of the engineering school and its decision-making processes are well organised in order to properly carry out programme development.

2. A.3.4. MANAGEMENT

The school is managed according to efficient, fair and transparent processes. Specifically, the key administrative processes (human resources, finance and account management, quality management) and the key academic processes

(teaching methods, student registration and other academic services) are formally set out in an optimal way that satisfies all stakeholders.

Management of processes and information about the programmes is supported by a sound and efficient IT structure.

2. A.4. REPUTATION AND COMMUNICATION

The school ensures its attractiveness and develops an image policy in line with its educational project and regional, national and international status.

External communication is organised, consistent with the institution's strategy, and contributes to improving its reputation.

The school ensures the public dissemination of unbiased and up-to-date, qualitative and quantitative information about its structure, recruitment conditions, objectives, curricula, learning outcomes and graduate employment.

It guarantees the accuracy of information published.

2. A.5. HUMAN AND PHYSICAL RESOURCES

2. A.5.1. HUMAN RESOURCES

Human resources are sufficient and appropriate to support and develop the engineering programmes. Specifically, teaching and other academic activities rely on a sufficiently numerous staff of permanent, qualified, academic and research faculty members.

The school manages its human resources carefully, paying particular attention to diversity.

2. A.5.2. PHYSICAL RESOURCES AND FACILITIES

Physical resources and facilities (lecture rooms, computer and information centres, library, etc.) are sufficient and appropriate for the different academic and research activities.

2. A.5.3. FINANCIAL RESOURCES

The resources available to the engineering school are sufficient and sustainable.

2. B. EXTERNAL LINKS AND PARTNERSHIPS

The school is strongly integrated into its local, national and international environment. It establishes partnerships with counterpart institutions and its stakeholders, particularly employers and communities.

2. B.1. INDUSTRY LINKS

The engineering programmes have established lasting and mutually beneficial relationships with industry. Active professionals are involved in the school's bodies as well as in the design and implementation of programmes.

Management of the engineering school is open to the needs of the engineering profession and teaching methods are adapted to fulfil these needs.

2. B.2. RESEARCH AND INNOVATION LINKS (AT SCHOOL LEVEL)

The school has a clear research and innovation policy.

2. B.2.1. RESEARCH LINKS

The engineering programmes have established links and partnerships with internal or external research departments and/or organisations. Teacher-researchers are involved in research teams, thus facilitating awareness of and initiation into research for engineering students.

The quality of the school's research is recognised by the scientific community as well as by the professional community.

2. B.2.2. INNOVATION, TRANSFER AND ENTREPRENEURSHIP

The school has a clearly identified policy for innovation, development and transfer of research results, and entrepreneurship. It has explicitly stated objectives and resources, and their achievement is periodically monitored.

Through its educational and research activities, the school contributes to the creation of innovative projects, products or services, activities and companies. Teachers, students and active professionals are associated with these activities in each programme.

2. B.3. INTERNATIONAL LINKS

The school's international strategy targets international recognition and the training of engineers capable of working in an international context.

2. B.3.1. STRATEGY AND COMMUNICATION

The school's management team has an explicitly stated international strategy, which is consistent with its overall strategy to demonstrate its quality internationally.

2. B.3.2. ORGANISATIONAL STRUCTURE AND INTERNATIONALISATION

The school ensures that the human and financial resources dedicated to its international activities are in line with its objectives. In particular, it encourages the international mobility of its teachers.

The school sets up welcome facilities for students and teacher-researchers.

2. B.3.3. PARTNERSHIPS AND INTERNATIONAL NETWORKS

The school is involved in European and International education (and, when appropriate, research) networks, to share experience on training activities, collaborate on research projects, and establish industrial partnerships.

Scientific and academic relations at European and International level have an impact on teaching methods and training programmes.

2. B.3.4. STUDENT MOBILITY, JOINT AND DOUBLE DEGREES

To enhance the internationalisation of its curricula and within the framework of agreements, the school offers its students international mobility opportunities, double degree programmes, joint degrees and joint courses. The school regularly evaluates ongoing agreements.

2. B.4. LINKS AT NATIONAL LEVEL

The engineering programmes are recognised nationwide and involved in different networks and initiatives at national level.

2. B.5. LINKS AT LOCAL LEVEL

The engineering programmes have established lasting and mutually beneficial relationships with local industry, public authorities and other local players in the field of engineering research and education. They actively contribute to local innovation and research initiatives.

2. C. TRAINING PROGRAMME AND PROCESS

The training objectives of each programme reflect identified and significant needs of society and, specifically, of the engineering profession, for scientific, technical, industrial and organisational competence.

The educational objectives of the programmes are expressed in terms of programme outcomes. These outcomes are consistent with the programme outcomes framework for accreditation by CTI and with the EUR-ACE® programme outcomes.

2. C.1. GENERAL STRUCTURE OF THE CURRICULUM [AT MOST RELEVANT LEVEL: SCHOOL OR PROGRAMME]

Students' workload and the Programme outcomes of the curriculum comply with Level 7 of the Framework of Qualifications for the EHEA. Students' workload is typically 300 ECTS credits of higher education, awarding the Master's Degree of Engineering Science. Integrated master's and master's following a bachelor's degree are eligible. The curriculum comprises multi-disciplinary academic courses, soft skills, technological training and periods of professional training.

The programme includes basic or applied research activities.

Students are trained in the school which awards the engineering degree, during a significant part of the curriculum; if applicable, the part carried out outside the school (internships in companies, academic exchanges, etc.) remains under the control of the school by contracts with the host institutions.

2. C.2. DESIGN AND FOLLOW-UP OF THE TRAINING PROJECT [AT PROGRAMME LEVEL]

The training project leading to the degree meets identified professional needs, in terms of scientific, technical, soft skills, industrial and organisational competencies. The target job market is national and international.

2. C.2.1 - 2. C.2.2. COMMUNICATION WITH STAKEHOLDERS

For the development of the training project and its follow-up, the programme has effective relations with its international environment.

The school has advisory committees comprising professional representatives and alumni; students may participate. For each programme (or programme cluster), the committees provide advice for follow-up and updating the curriculum.

2. C.2.3. DESIGN AND APPROVAL OF PROGRAMMES

Training objectives are set as learning outcomes, defined in terms of knowledge, capacities and general and specific competencies with regard to professional profiles.

There is a clear formal process for the design and approval of new engineering programmes.

The programmes are regularly reviewed and updated to assess their relevance.

2. C.3. PROGRAMME CONTENT AND OUTCOMES (AT PROGRAMME LEVEL)

The programme educational objectives are consistent with the mission of the engineering school and with the needs of the stakeholders (such as students, industry, engineering associations, etc.). They must be achievable with the human and physical resources available for the programme.

2. C.3.1. CONSISTENCY OF EDUCATIONAL OBJECTIVES

The link between each Teaching Unit (TU) of the curriculum and the learning outcomes is established (e.g. in the form of a matrix). The educational objectives are publicly available and clearly understandable by students and other stakeholders.

A significant part of training is devoted to non-scientific or technological subjects: languages; human, economic, social and legal sciences.

2. C.3.2. COMPLIANCE OF THE CURRICULUM WITH EHEA STANDARDS

If the curriculum is delivered in Europe, it is built in compliance with the general principles of the Bologna process: organisation in semesters, ECTS credits allocation, diploma supplement; the programme outcomes are in accordance with those at master's level (level 7) in the European Qualifications Framework and at second cycle level, in the **EUR-ACE® Framework Standards.**

2. C.3.3. TRAINING PROGRAMME BREAKDOWN

The expected programme outcomes are systematically broken down into learning outcomes assigned to the individual modules.

The curriculum is described clearly and is properly structured. It is made available to the relevant stakeholders, particularly students and faculty.

2. C.4. PROGRAMME IMPLEMENTATION [AT MOST RELEVANT LEVEL: SCHOOL OR PROGRAMME]

The school has defined and validated its studies regulations, which are made public and communicated to each student upon arrival in the school.

Studies and evaluations must be adapted on a case-by-case basis to take account of individual situations related to disability or specific pathways.

2. C.4.1. WORK-BASED TRAINING

Along with a sound theoretical coverage of engineering theory and principles, the curriculum includes learning experiences which enable the development of practical skills to enhance graduate employability and strengthen the links with industry.

Engineering programmes aiming to award the *Titre d'Ingénieur diplômé* should comprise a significant amount of industrial experience throughout the curriculum, mainly in the form of internships in industry.

Some additional guidelines

Learning experiences that contribute to practical training include:

* Internships in industry

* Learning activities that reproduce real-life experiences (projects, simulations and industry games);

* Industry visits, and seminars organised by industry representatives;

* Individual orientation activities and coaching.

CTI considers a compulsory period of internship in industry a particularly suitable method of achieving a number of important objectives for students:

* Ensure student awareness of and openness to the professional world, and particularly the societal, economic, legal, ethical and human aspects.

* Become acquainted with organisations and organisational structures.

* Acquire some basic professional and relational skills and understand their future role within the organisation.

* Apply a combination of knowledge, competencies and attitudes learnt in engineering studies to a real-life professional situation.

* Provide an initial contact with the professional sector, thereby improving graduate employability.

2. C.4.2. RESEARCH ACTIVITIES FOR STUDENTS

The programme involves research activities which give students access to state-of-the-art equipment, develop their scientific skills and prepare them to interact with researchers in their future professional activity.

These research activities may take various forms: bibliographical research, critical evaluation, regulation, participation in laboratory research activities, master's project in research laboratory...

2. C.4.3. INNOVATION AND ENTREPRENEURSHIP

The programme opens future engineers' minds to innovation and business. It aims to encourage critical thinking, risk-taking, creativity, taking into account user needs, commitment to entrepreneurship, and more.

These aspects may be based on transversal activities and specific events, which enable each student to carry out a personal or collective (innovation or activity) project; this project must comprise activities such as needs analysis, creativity, experiments and carrying out a business plan.

This kind of training must be available to all students, and options may be available for those who wish to specialise further.

Joint projects with students from other fields are encouraged.

2. C.4.4. AWARENESS OF INTERNATIONAL CONTEXT

2. C.4.4.1. INTERNATIONAL CULTURE

The school develops a multicultural environment including foreign language teaching to ensure the international mobility of students and staff and develop their capacity to work in an international context.

Some additional guidelines

The capacity to work in an international context depends on:

* The ability to communicate with foreign collaborators, clients and partners;

* The ability to cope with new and unexpected situations;

* The ability to integrate into a different social, legal and working environment;

* The ability to work as a multidisciplinary and multicultural team

* The ability to master the Information Technologies necessary for effective remote communications.

2. C.4.4.2. LANGUAGE PROFICIENCY

English is the basic communication tool for professionals. Graduates should therefore demonstrate a good command of this language (at least B2 level as defined by the **Common European Framework of Reference for Languages).**

The option of third language attainments is strongly recommended, with level assessment if possible.

Some additional guidelines

Degree programmes aiming to award the "Titre d'Ingénieur diplômé" should demonstrate an appropriate command of English and French at the end of their studies (B2 level). French teaching is therefore recommended as a third language, in non-French speaking countries.

2. C.4.4.3. CULTURAL BACKGROUND

Graduates must be able to take into account the diverse range of technological, socio-economic and cultural factors.

2. C.4.4.4. INBOUND AND OUTBOUND MOBILITY

The programme offers study periods or internship experiences abroad. These mobility experiences are an integral part of the curriculum and are appropriately followed up and assessed by the institution.

The institution hosts international students of various nationalities in accordance with its international strategy. Specific actions and resources are set to ensure the cultural and academic integration of these students.

International student recruitment is managed to ensure that incoming students have the appropriate entry level and profile.

2. C.4.5. SUSTAINABLE DEVELOPMENT, ETHICS AND PROFESSIONAL ETHICS

Major medium- and long-term societal issues are part of the engineering programme. The concepts of sustainable development, social responsibility, ethics and professional ethics are introduced throughout the curriculum. The corresponding learning outcomes are assessed.

2. C.5. PROGRAMME DELIVERY

2. C.5.1. TEACHING METHODS

Teaching activities combine classical (deductive) methods with problem-based or project-based learning methods.

Innovative educational methods, and in particular active pedagogies, are encouraged, developed and shared. They are regularly assessed.

2. C.5.2. THEORY / PRACTICE / INNOVATION BALANCE

The programme uses project-based teaching and relies heavily on concrete situations and achievements within collective projects. Significant training time is provided by professionals from the corporate world.

2. C.5.3. WORKLOAD

The programme workload is reasonable and enables students to achieve the programme outcomes with enough time left for personal work, and for engaging in independent learning.

Besides compulsory modules, there is a sufficient range of elective subjects to enable students to build their own professional profile.

2. C.5.4. STUDENT LIFE

Resources and services are in place to ensure students' quality of life (housing services, counselling and health services, student clubs and associations, sports facilities, etc.).

Extracurricular activities are considered a fundamental contribution to the achievement of educational objectives, and to the personal development of students, and they can be recognised or validated (credits awarded).

2. C.6. CAREER GUIDANCE FOR STUDENTS AND GRADUATION

2. C.6.1. STUDENT FOLLOW-UP AND TUTORING

Personal student follow-up and tutoring is provided. This tutoring enables appropriate individual mentoring in case of problems and contributes to reducing failure at exams and the student dropout rate.

2. C.6.2. ASSESSMENT OF STUDENTS

The assessment methods employed are fair and consistent. They are used to assess achievement of expected learning outcomes by every student.

Full information on the assessment methods used and examination results are provided to the students.

2. C.6.3. ENGINEERING QUALIFICATION CERTIFICATION

An engineering qualification degree is awarded to graduates who demonstrate that they have achieved the programme outcomes.

The engineering qualification is an entry route into the engineering profession.

In the EHEA, a *Diploma Supplement* in English must be issued in addition to the qualification certificate.

Some additional guidelines

If an official professional body (charter, registry, association, etc.) exists in the country, the engineering qualification is accepted by the professional body as an appropriate entry to the profession.

2. D. STUDENT ADMISSION AND SELECTION (AT MOST RELEVANT LEVEL: SCHOOL OR PROGRAMME)

2. D.1. ADMISSION AND SELECTION STRATEGY

The programme management team has set selection and admission objectives which comply with national regulations and are consistent with the programme objectives and the overall HEI strategy.

2. D.2. – 2.D.3. ORGANISATION OF STUDENT ADMISSION AND SELECTION

The selection and admission process is organised in a rigorous and fair way. Clear and sufficient information on selection criteria and methods is communicated to the relevant stakeholders.

2. D.4. ADMISSION CRITERIA

Admission criteria are expressed in terms of expected entry requirements and are consistent with the programme objectives and outcomes.

The admission process for international students includes individual interviews. The school sets up additional courses to facilitate, if necessary, the integration of foreign students.

2. D.5. - 2.D.6. ATTENTION TO DIVERSITY

The school implements actions to strengthen the social diversity of its recruits.

The school has established specific actions to facilitate the training of students with disabilities (recruitment, accessibility of equipment, exams).

The school performs awareness-raising actions to encourage engineering vocations.

2. E. GRADUATE EMPLOYMENT

2. E.1. ANALYSIS OF ENGINEERING PROFESSIONS AND JOB MARKETS

The school has an organised approach to surveying and analysing the development of the job market and the employment of engineers.

2. E.2. PREPARATION FOR EMPLOYMENT

The school promotes career guidance and job preparation for future graduates.

The school values the creation of professional businesses by the engineering students and supports them.

2. E.3. – 2.E.4. EMPLOYMENT AND EMPLOYABILITY ANALYSES (AT PROGRAMME LEVEL)

Surveys are periodically conducted to collect and analyse information on the employment and careers of engineers in general, and more specifically on the employability of degree programme graduates (time to first job, level of wages, area of activity, etc.).

2. F. QUALITY ASSURANCE (AT SCHOOL LEVEL)

The school requires quality and continuous improvement in the achievement and results of its various activities. To this end, it complies with the national and European recommendations **(see ESG-2015)** on quality management.

2. F.1. INTERNAL QUALITY ASSURANCE POLICY

An explicitly stated internal quality assurance policy, aimed at the continuous improvement of the programme, has been established. This policy is consistent with the overall strategy of the HEI and is supported by the management team.

2. F.2. - 2.F.3. INTERNAL QUALITY ASSURANCE IMPLEMENTATION

The school formally sets out its quality processes: resources, processes, procedures, etc. All stakeholders (internal and external) are involved in programme quality assurance.

2. F.4. INTERNAL QUALITY MANAGEMENT

The school systematically evaluates its various processes; in particular, there is an organised approach to assessment of training activities by students.

The school identifies its strengths and weaknesses and implements an action plan for continuous improvement.

The quality assurance processes and results must be transparent for everybody involved.

2. F.5. EXTERNAL QUALITY ASSURANCE

2. F.5.1. - F.5.2. CTI AND OTHER ACCREDITATIONS

The HEI has a policy for its external quality assurance based on national requirements, and including CTI accreditation. The decision and recommendations of CTI are widely communicated within the school and to its stakeholders, including professional partners and students.

The recommendations of CTI are taken into account by the school's management and staff.
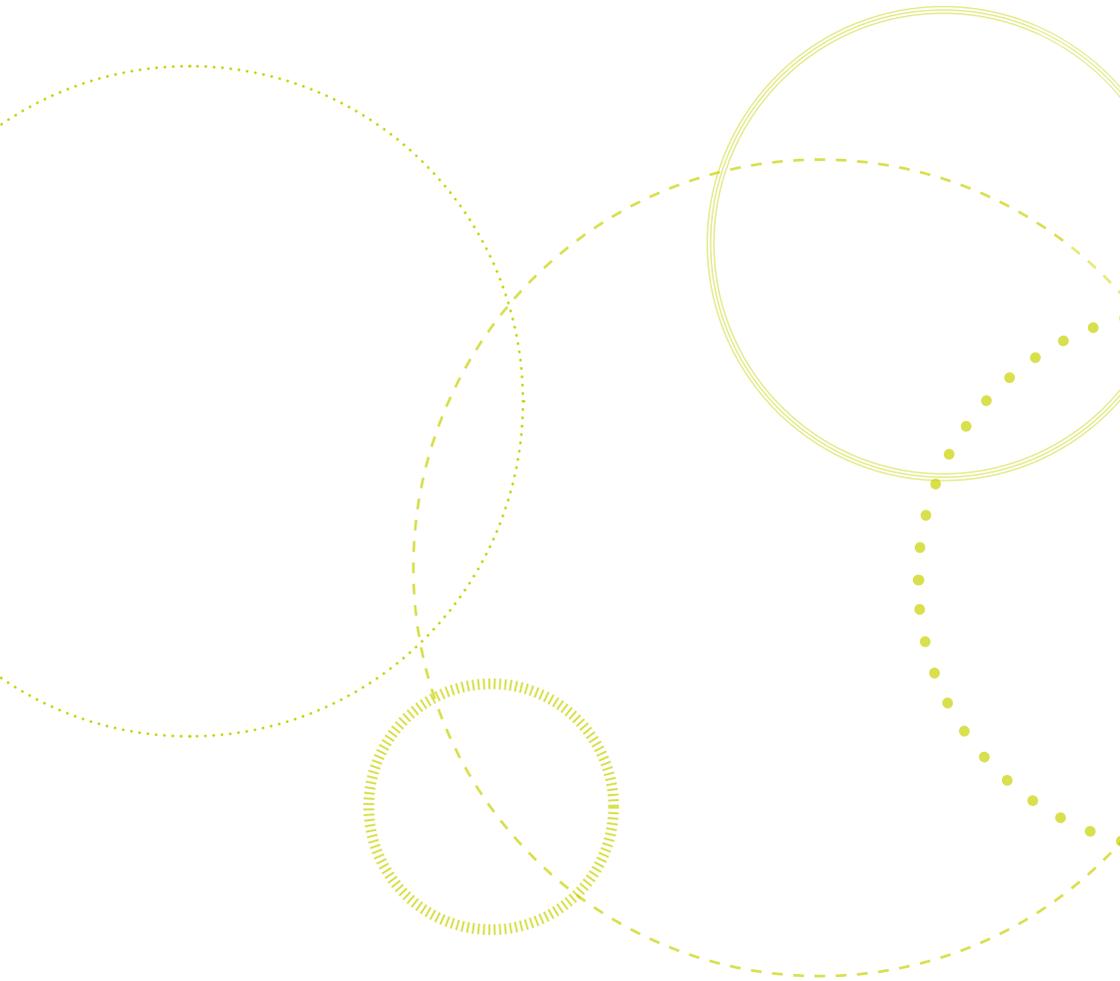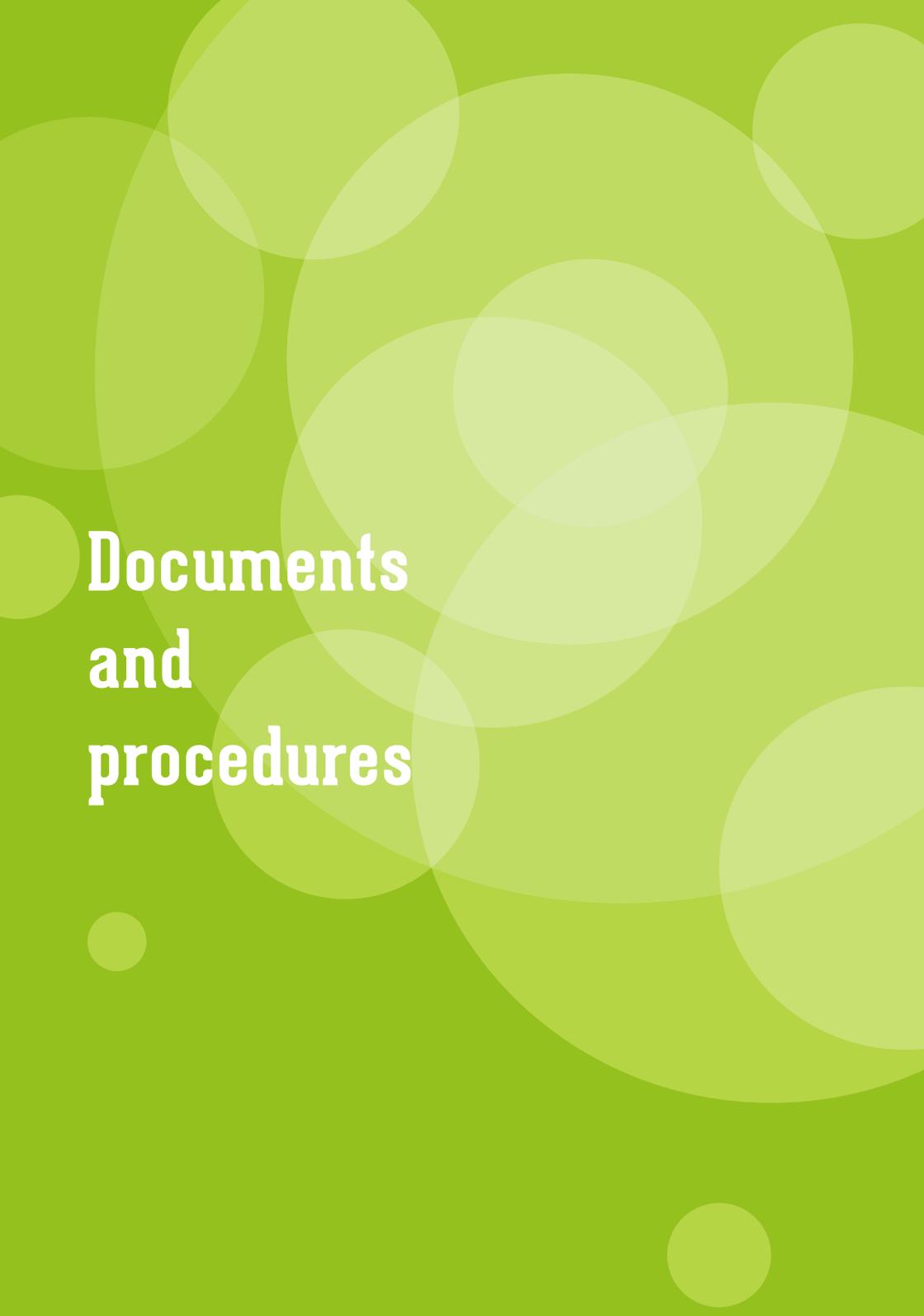
Documents and procedures

3. DOCUMENTS AND PROCEDURES

DOCUMENTS AND PROCEDURES FOR RECOGNITION OF AN INTERNATIONAL TRAINING PROGRAMME

One of CTI's activities is the evaluation and accreditation of engineering programmes outside France. CTI is currently working in several European and non-European countries, including Belgium, Bulgaria, Burkina Faso, Cameroon, China, Lebanon, Morocco, Switzerland, Tunisia and Vietnam. This process can take two different forms: recognition by the French State ("Admission par l'Etat"*), which may be accompanied by award of the EUR-ACE® label, or an evaluation with the sole aim of awarding the EUR-ACE® label.*

These evaluations or accreditations must be carried out as part of the institution's quality and continuous improvement approach.

3. A. RECOGNITION BY THE FRENCH STATE ["ADMISSION PAR L'ETAT"]

Each year, around 2 000 students are awarded qualifications by foreign institutions in over twenty specialities recognised by the French State. After State recognition, any new graduates may use the *"Titre d'ingénieur diplômé"* in France.

Where possible, these evaluations or accreditations are carried out in collaboration with local agencies or under the mutual recognition agreements signed under the ECA (European Consortium for Accreditation in higher education).

For joint work with the local agency, CTI and the agency may need to develop shared standards for evaluation of the training programme. In any event, these programmes need to deliver competencies that are consistent with the skills expected following an engineering programme.

Foreign schools submitting an application must adapt it to the framework they are given, taking into account the specifics of the country where the training programme takes place.

3. A.1 FIRST APPLICATION FOR STATE RECOGNITION [ADMISSION PAR L'ETAT]

SUBMISSION OF A LETTER OF INTENT TO THE FRENCH MINISTRY IN CHARGE OF HIGHER EDUCATION

The first application involves the foreign institution making contact with the French Ministry in charge of Higher Education. Within this ministry, the Department of post-secondary schools and private higher education under the General Directorate of Higher Education and Employability (DGESIP) is responsible for assessing the *Letter of Intent* sent to the French Ministry.

The DGESIP asks the institution to provide a letter from its ministry officially supporting the application, in accordance with the terms of Article L642-7 of the French Education Code.

Letters of Intent announcing an application for *State recognition* must be sent to the French Ministry of Higher Education:

*   **either by post to:**

Direction générale de l'enseignement supérieur et de l'insertion professionnelle

Service de la stratégie des formations et de la vie étudiante
Sous-direction des formations et de l'insertion professionnelle
Département des écoles supérieures et de l'enseignement supérieur privé
1 rue Descartes
75231 Paris CEDEX 05
FRANCE

*   **or scanned and attached to an e-mail sent to:**

À l'attention du chef du département des écoles supérieures et de l'enseignement supérieur privé

greffe-cti@education.gouv.fr
Telephone: +33 (0)1 55 55 67 25

Ideally, *Letters of Intent* should reach the department before the 1st of November of Year N so that CTI evaluation work can be scheduled during university year N+1/N+2, with a view to potential *State recognition* as of the start of the academic year in September of Year N+2 in the interministerial decree establishing the list of schools authorised to issue French engineering degrees, published at the start of calendar year N+3. Applications outside of this period may still be considered, as gaps are left in the schedule. These additions are subject to CTI approval during its plenary meeting.

The DGESIP Department of post-secondary schools and private higher education then sends the *Letter of Intent* to CTI to officially ask for its opinion on the application, for training programmes that are already open.

The admissibility assessment procedure may vary depending on applications.

PRIOR ASSESSMENT OF APPLICATION ADMISSIBILITY BY CTI

CTI performs prior analysis to assess the admissibility of the application depending on its resources and to prepare for any other potential difficulties (e.g. regulatory or structural difficulties)

The following information is necessary for assessing application admissibility:

*   general information about the institution (name, official status, size, study programmes and number of students)

*   general information about the programme to be accredited (date of creation, number of students, branch of engineering, level, number of years of study, ECTS credits)

*   governance (team / entity in charge of programme management)

*   short description of the programme outcomes and organisation and the main teaching units (work placements, projects, theoretical and practical training, teaching language)

*   level of qualification in the country of origin. Is this an official qualification endorsing a master's level engineering programme in the country of origin? Is this qualification accredited by the country's competent

authorities and the national agency/agencies (e.g. Ministry of Education, quality assurance bodies, professional bodies, etc.)?

* reasons for applying for recognition by the French State

Meetings can be scheduled by CTI with the applicant to define the scope of evaluation and terms of reference, with or without the local accreditation agency. In the event that the institution wants an official position, an audit mission is commissioned and a quote is drawn up. This admissibility assessment leads to a recommended schedule for the mission with a view to *State recognition.*

REGISTRATION OF THE APPLICATION IN THE CTI REGISTRY

CTI informs the applicant institution and the DGESIP Department of post-secondary schools and private higher education of the outcome of the admissibility study.

In the event of a positive outcome:

* CTI informs the applicant institution of the cost of evaluation

* the DGESIP Department of post-secondary schools and private higher education asks the registry secretary to register the project in the list of the Commission's work, with a view to scheduling the evaluation

* once this schedule has been validated by the Commission, the CTI registry informs the applicant institution of the date by which it must submit its application, the audit team visit period and the date of final assessment at the plenary meeting

SUBMISSION OF FILE FOR STATE RECOGNITION TO THE CTI REGISTRY

On the date given by the registry secretary, the application for *State recognition,* including a scanned copy of the original government letter addressed to the French ministry to support the application, must be submitted electronically to the CTI registry.

The application should include a self-evaluation file and associated appendices, and a certified specific data sheet for foreign institutions.

3. A.2. APPLICATION TO RENEW STATE RECOGNITION [ADMISSION PAR L'ETAT]

The CTI registry writes to schools or universities whose *State recognition* is up for renewal to remind them that they will soon need to submit an accreditation application file and a letter from their ministry if they intend to apply for renewal.

The e-mail sent by the registry to institutions mentions that the cost of accreditation will be specified by CTI. The CTI secretariat draws up and sends a quote to the institution, specifying that it is contacting the local agency.

If the schedule is confirmed, the process is the same as for the first accreditation.

For both first evaluations and renewals, the rest of the procedure is carried out as for evaluation of a French training programme: audit visit, mission report drawn up by the audit group coordinated by the panel chair, presentation before the Commission's plenary meeting, decision issued during the meeting sent by CTI to the institution, publication of the decision on the CTI website, notification by the departments of the French Ministry in charge of Higher Education, *State recognition* is made official in an interministerial decree that establishes the list of schools authorised to issue French engineering degrees.

The only difference is that notification from the Ministry is sent to the applicant government as main recipient, and copied to the institution and CTI.

Accreditation renewal procedures have a strong focus on the follow-up of recommendations and evaluation of new elements, if appropriate.

3. B. EUR-ACE® LABEL ONLY, AFTER EVALUATION

New applications are submitted in particular by foreign institutions with strong links to French schools who use their training model.

Where possible, these evaluations or accreditations are carried out in collaboration with local agencies or under the mutual recognition agreements signed under the ECA (European Consortium for Accreditation in higher education).

Foreign schools submitting an application must adapt it to the framework they are given, taking into account the specifics of the country where the training programme takes place.

For award of the EUR-ACE® label, the documents to be attached to the self-evaluation report are described in Appendix 1 of the EAFSG **(see EAFSG-2015).**

The use and place of these additional documents and information in the overall quality assurance system and/or the design of the programmes delivered by the HEI/school must be developed and explained in the self-evaluation report.

These documents must also be available to the panel during the site visit.

3. B.1. FIRST EUR-ACE® LABEL APPLICATION

This first application involves the foreign institution making contact with CTI, either via the CTI registry or via the CTI permanent team.

The first step for a foreign institution that wants to be evaluated by CTI with a view to obtaining the EUR-ACE® label is to request prior assessment from CTI. This prior assessment allows CTI to assess the admissibility of the application in line with CTI resources and to prepare for any other potential difficulties (e.g. regulatory or structural difficulties).

The following information is necessary for assessing application admissibility:

* reasons for applying for the EUR-ACE® label

* general information about the institution (name, official status, size, study programmes available and number of students)

* general information about the programme to be evaluated (date of creation, number of students, branch of engineering, level, number of years of study, ECTS credits)

* governance (team / entity in charge of programme management)

* short description of the programme outcomes and organisation and the main teaching units (work placements, projects, theoretical and practical training, teaching language). This description must respond to ENAEE evaluation criteria, point by point, in terms of overall organisation and quality assurance, and framework standards

* level of qualification in the country of origin. Is this an official qualification endorsing a master's level engineering programme in the country of origin? Has this qualification been accredited by the country's competent authorities and the national agency/agencies (e.g. Ministry of Education, quality assurance bodies, professional bodies, etc.)?

Meetings can be scheduled by CTI with the applicant to define the scope of evaluation and terms of reference, with or without the local accreditation agency.

A quote for the cost of evaluation will be provided if the admissibility assessment is positive.

Once this admissibility phase has been completed and a deposit on the total accreditation cost has been paid to CTI, CTI sends the application to its registry, which schedules this evaluation in the annual programme and sets the date for file submission, the visit period and the date of presentation at the Commission's plenary meeting.

The applicant institution receives an e-mail from CTI with these dates and the panel chair's contact information. This information is also shown in CTI's work schedule, published online on the CTI website.

The EUR-ACE® label application file must be sent to CTI by e-mail only. The file should include a self-evaluation report and associated appendices, and a certified specific data sheet for foreign institutions.

3. B.2. APPLICATION FOR RENEWAL OF THE EUR-ACE® LABEL

CTI writes to institutions whose EUR-ACE® label is due to expire and proposes to renew the award. Once the quote has been accepted and the deposit paid, CTI sends this information to its registry for scheduling in the campaign and sends an e-mail to the foreign institution to inform it of the date by which it must submit its file by e-mail.

Procedures are then the same as for the first accreditation.

For both first EUR-ACE® label applications and renewals, CTI makes a decision and publishes it on its website. It may share it with the partner agency in the event of evaluation on behalf of another agency.

EUR-ACE® label renewal procedures have a strong focus on the follow-up of recommendations and evaluation of new elements, if appropriate.

3. C. COST OF AN ACCREDITATION PROCEDURE

The costs of training programme evaluations carried out by CTI outside France shall be paid in full by the relevant institutions.

Protocol: Any audit mission by a group of CTI experts shall be preceded by execution of an agreement protocol setting out the financial terms and conditions of the mission.

A reference scale of the costs to invoice to institutions, calculated as follows:

a. Fixed costs (contextual preparation, preparatory CTI meetings, training, administration, overheads, etc.):

   * Fixed cost per institution

    * Fixed cost per programme

b. EUR-ACE® label: cost per label awarded (sum invoiced depending on the outcome of the procedure).

c. Expert assessment costs invoiced depending on the number of experts and length of visit (in days). This invoice includes travel days and, where necessary, preparation days. Invoiced per expert per day plus a mission fee for the panel chair.

Logistics: the institution directly pays for logistics costs (economy class transport, accommodation and catering, visa and vaccination costs, etc.) for experts commissioned by CTI. Logistics for the team of experts shall be managed directly by the school.

Payment: 30% of fixed costs (see point a. above) shall be invoiced upon execution of the protocol between the two parties. The outstanding amount (outstanding fixed costs and points b. and c. above) shall be invoiced following the Commission's relevant plenary meeting.

Special instances: when audit missions are carried out in cooperation with another agency, the scale above may be adapted on a case-by-case basis to harmonise expert invoices and compensation with the applicable rates in the partner agency. The exceptional scale applied shall be set by the President of CTI upon execution of the agreement protocol with the institution.

Contact **international@cti-commission.fr** to obtain a quote
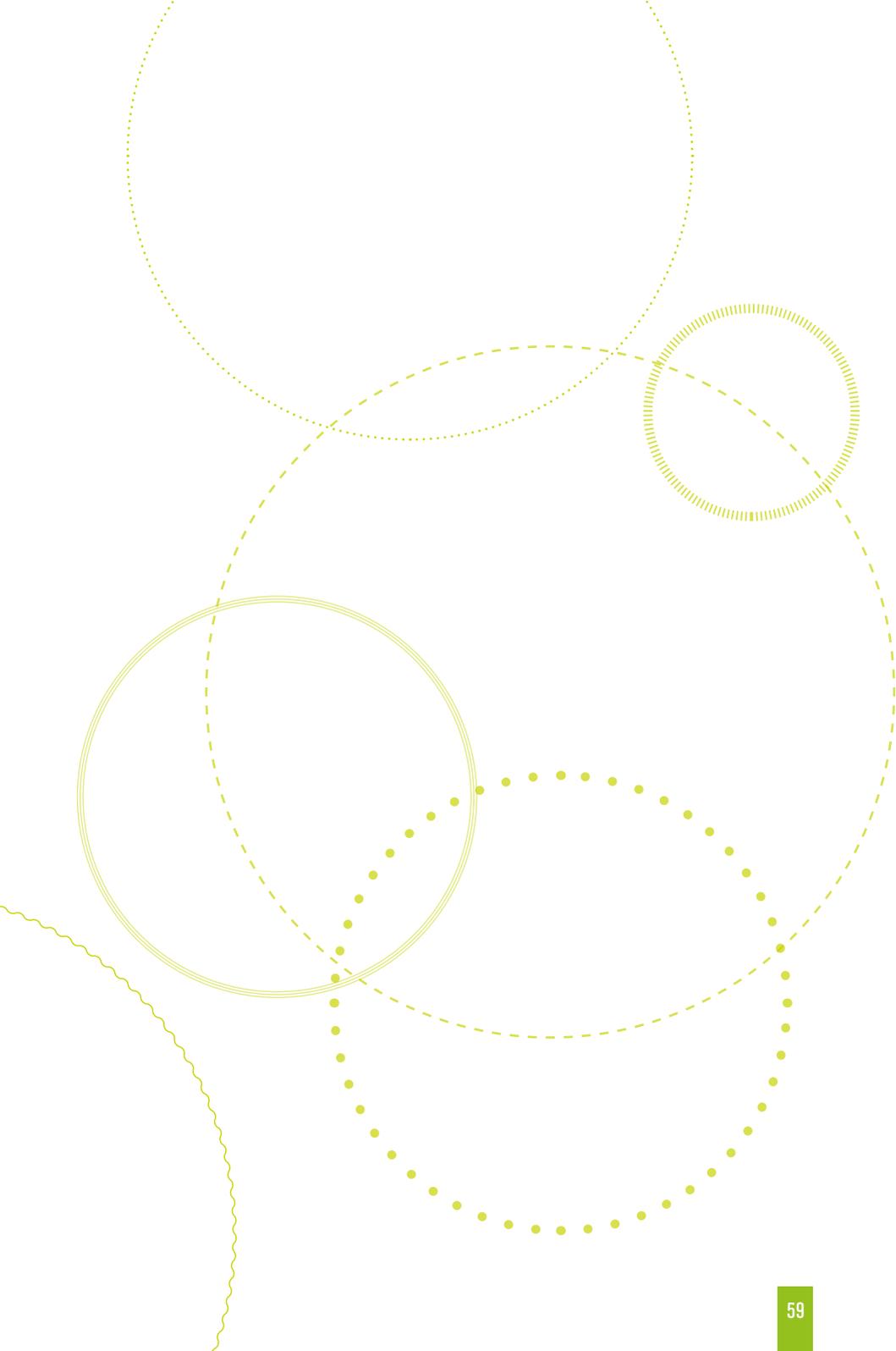
APPENDICES

STANDARDS AND GUIDELINES FOR QUALITY ASSURANCE IN THE EUROPEAN HIGHER EDUCATION AREA

http://www.enqa.eu/index.php/home/esg/ *(English version)*

http://www.enqa.eu/indirme/esg/ESG%20in%20French_by%20Réseau%20FrAQ.pdf *(French version)*

EUR-ACE® FRAMEWORK STANDARDS AND GUIDELINES

http://www.enaee.eu/wp-assets-enaee/uploads/2015/04/EUR-ACE-Framework-Standards-and-Guidelines-Mar-2015.pdf *(English version)*

http://www.enaee.eu/wp-assets-enaee/uploads/2012/02/170215-French-version-EAFSG.pdf *(French version)*

OECD LIST OF ENGINEERING BRANCHES (P. 37)

http://www.oecd.org/edu/skills-beyond-school/43160507.pdf *(English version)*

FRENCH NATIONAL REGISTER OF PROFESSIONAL CERTIFICATIONS (RNCP)

http://www.rncp.cncp.gouv.fr/ *(French version)*

COMMON EUROPEAN FRAMEWORK OF REFERENCE FOR LANGUAGES

https://www.coe.int/t/dg4/linguistic/source/framework_en.pdf *(English version)*

EUROPEAN QUALIFICATION FRAMEWORK

https://ec.europa.eu/ploteus/content/descriptors-page *(English version)*