

EUR ING TUTORIAL



ENGINEERS EUROPE

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Foreword

This tutorial is intended as an internal ENGINEERS EUROPE document and cannot be complete without the information from the EUR ING SPEC. In this tutorial, the structure of the EUR ING framework, the tools, and the way of working together among NMCs, EMC, and the secretariat are explained. As well, the complementary additions to the framework are given.

Additional information can be added to this document by EMC decision, mainly concerning updating the way of working with recent or changed information, working together improvements within the EMC, NMCs, and the Secretariat.

During the process of making the new documentation, the EMC recognized that working together, both in physical and online meetings, among NMC members, EMC members, and the secretariat is highly appreciated. We hope current and future members will keep this cooperation close to heart.

When any assistance is required, please contact your EMC ambassador, preferably through videoconferencing.

When it is not clear who your EMC ambassador is, look at
[List of EMC ambassadors](#)

or please contact the ENGINEERS EUROPE Secretariat at
Secretariat.general@engineerseurope.com.



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I. Introduction

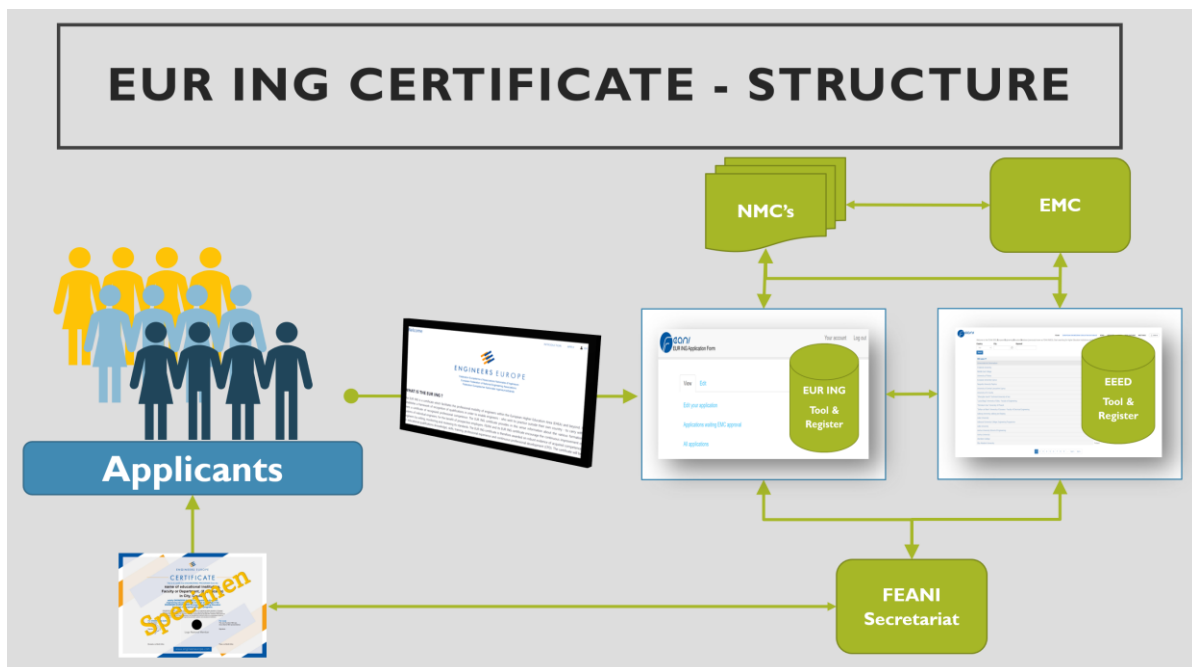
The purpose of this tutorial is to inform and facilitate the work of **three groups**:

- At the international level, the ENGINEERS EUROPE European Monitoring Committee (EMC).
- At the national level, ENGINEERS EUROPE National Monitoring Committees (NMCs), one of each ENGINEERS EUROPE member state.
- The ENGINEERS EUROPE Secretariat.

In order to process applications efficiently, these groups work with **two online tools** and some documents:








- Working documents: The EUR ING SPEC, a report template for remote maintenance, Excel files for program evaluation (against the EUR ING SPEC), etc.
- The online EURING Application and Certificate tool.
- The online European Engineering Education Database (EEED) tool.

The EUR ING system structure can be seen in the following picture and the components will be introduced in the following sections:



a. European Monitoring Committee (EMC)

The EMC is an ENGINEERS EUROPE body and is composed of representatives of the members of ENGINEERS EUROPE. Its main tasks comprise of:

-  Making recommendations to the Executive Board.
-  General policy matters relating to the EUR ING Certificate/Register and the EEED.
-  Review and decide on EUR ING SPEC additions.
-  Review and decide upon applications for the EUR ING Certificate registration.
-  Granting permissions to NMCs for remote updated of the EEED.
-  Review and decide upon the acceptance of programmes to the EEED (where no remote access is currently granted).
-  Each EMC member acts as an EMC Ambassador to several NMCs for NMC questions/comments.

Link to the formal terms of reference for the EMC which were approved by the General Assembly: [LINK](#)

Current document: [List of EMC ambassadors](#)

b. National Monitoring Committees (NMCs)

The NMC is a national body, established in every ENGINEERS EUROPE country, and is composed of representatives from national engineering associations, industry, and education. Its main tasks comprise of:

Review of applications for EUR ING Certificate registration

- Review of applications for EUR ING Certificate registration which includes checking all the information given by the applicant and certifying its accuracy and authenticity with respect to education, professional experience, CPD (Continuing Professional Development), and (where appropriate) CLA (Career Learning Assessment), checking that all appropriate instructions with respect to the application form have been followed.

Maintaining EEED programs and HEI information

- To keep the EMC fully informed on the structure of its *Engineering Educational and Professional System* and the standards of the individual Schools and Programs and to report regularly on any changes in structure or national standards.
- Ensure compliance with the requirements of the standard for EEED inclusion.
- Bring forward details of new programs to be considered for inclusion in the EEED. NMCs are asked to submit an annual overview list of programmes submitted based on this scheme, which undergoes a regular general review (every +/- 5 years).
- The NMC is responsible for the information given for inclusion in the EEED in respect of its own country. If this has been approved by the EMC the programme submissions by the NMCs are directly entered into the EEED without undergoing the above procedure based upon programme evaluation sheets.

Current document: [List of NMCs with Remote Maintenance Permission](#)

c. ENGINEERS EUROPE Secretariat

The ENGINEERS EUROPE Secretariat supports all ENGINEERS EUROPE activities and administers the EUR ING Register and the European Engineering Education Database (EEED).

E-mail: Secretariat.general@engineerseurope.com

d. EUR ING Certificate application tool and register

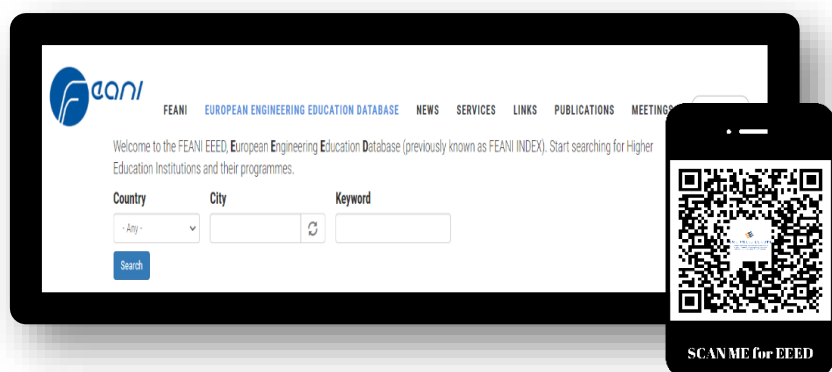
ENGINEERS EUROPE maintains an online EUR ING application tool and register containing the approved applications. The EUR ING Certificate is valid for 5 years, after which renewal is needed. NMCs will be informed when renewal is needed.

During the period of validity, the holder remains a member of the national organization and observes the provisions of the ENGINEERS EUROPE Position Paper on Code of Conduct: Ethics and Conduct of Professional Engineers.



e. European Engineering Education Database (EEED)

To support the EUR ING Certificate Register, ENGINEERS EUROPE maintains an online [EEED](https://www.engineerseurope.com/eeed-database)¹ listing of Engineering programs, which are recognized by ENGINEERS EUROPE, at institutions of Higher Engineering Education in the European countries, represented within ENGINEERS EUROPE.



¹ <https://www.engineerseurope.com/eeed-database>

II. Lifelong learning power of an engineer.

The EMC recognizes that learning during an engineering career is not contained to engineering or technology alone. This short exercise is to create, also towards people who are not engineers, a recognizable and simple indication of the '1000 ECTS lifelong learning power of engineers',

An engineering career path might be typically but not exclusively be framed as follows:








Student	-	Young Professional	-	Professional	-	Expert	-	Nestor
5 years	-	15 years	-	15 years	-	20 years	-	next 100 years

Engineers Salute: Expert picture: [Kitty O'Brien Joyner](#) - Nestor Picture: [Isambard Kingdom Brunel](#)

The EMC estimates, but does not prescribe, that all engineers are able to learn 1000 ECTS on engineering subjects during their entire life. The reasoning and estimation behind the 1000 ECTS learning power of an engineer can be seen in the table on the next page:



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Career phases & Estimated learning time (in ECTS)	Explaining description
 General	A lot of precious time and energy will be needed to learn other than engineering subjects. Typically these will not be relevant for engineering and EUR ING evaluation.
 Student: 180-300 ECTS	Basic engineering education. In some countries the basic education /diploma includes the first work experience.
 Young Professional & Professional & Expert: 300 ECTS	<p>After graduation during work, people educated themselves for about 10% of the time that is 4 hrs per week. A working year is about 40 weeks, so $4 \times 40 = 160$ hours per year. 160 divided by 28 is almost 6 ECTS per year. With a working career of about 50 years that sums up to about 300 ECTS.</p> <p>During life, we all change, from junior to senior, from young to experienced, etc. Learning interests are changing year by year.</p> <p>Fire safety training of EQF level 4 might not be engineering level BUT really important and these kind of hours should also be counted for learning/CPD time.</p>
 Professional & Expert: 120 ECTS	<p>After the initial start of their career, a lot of engineers start with extra bachelor/master`s education of about 20 hours a week for 4 years besides their daily jobs. 20 hours per week is about 30 ECTS per year.</p> <p>Further education in 'business management' is done very often by engineers.</p>
 Nestor: 300 ECTS	After retiring a lot of engineers are still discovering new technologies outside their own expertise. While not having to work anymore this is often 8-10 hours per week so about 15 ECTS per year. Retirement lasts on average around 20 years.

The total estimated learning power of an engineer is more than 1000 ECTS





² 1 ECTS equals 25-30 hours workload.

III. EUR ING SPEC additions

f. EUR ING compliant engineering program category subjects

Engineering programs evolve every year with technology developments. The required content cannot be strictly described. In the table below example subjects are given without trying to be complete.

When new subjects arise, please communicate those to your EMC ambassador or the secretariat for review.

Categories	Engineering Category Subjects
 Natural sciences	Physics, Chemistry, Biology, Geology, Agriculture, Environmental ..
 Mathematics	Linear algebra, analytical geometry, differential and integral calculus, numerical analysis, operational research, discrete mathematics, statistics, numerical systems, ..
 Engineering sciences and subjects	Analysis, Design Methodologies, Research, Thermodynamics, Tribology, Production Technologies, Automation, Robotics, Drones, CAD/CAM/BIM, Systems Engineering, 3D printing technologies, material sciences, data-management, augmented reality, artificial intelligence, recycling technologies, technical safety, composing technical specifications and documents. ..
 Non-technical subjects	Learning to learn , communication skills, economics, management, team working, law, safety, languages ..

















g. Common types of engineering program and common accreditations

The following table with examples can help to understand which types of engineering programs and types of accreditations are common with the ENGINEERS EUROPE national members:

The 3 sources of accreditation/evaluation of engineering programs:				
3 general types of engineering programs of EQF levels and amount of study load (in ECTS)		1. By law accredited programs	2. By private label accredited programs.	3. By ENGINEERS EUROPE evaluation of programs (Like individual programs.)
	First cycle degree (FCD): EQF level 6, 180–240 ECTS credits	First cycle degree Usually awarding a bachelor's degree. Typical titles at this level: Ingenieur (ing.) (NL) Ingenieur (Ing.) (AUT) dipl. Ing. FH/HES (CH)	First cycle equivalent Examples: The EUR-ACE framework standards.	First cycle equivalent Examples: By evaluation sheet.
	Second cycle degree (SCD): EQF level 7, 60–120 ECTS credits	Second cycle degree Usually awarding a master's degree. Typical titles at this level: Ingenieur (ir.) (NL) Diplomingenieur (DI, Dipl.-Ing) (AUT)	Second cycle equivalent Examples: The EUR-ACE framework standards.	Second cycle equivalent Examples: By evaluation sheet.
	Second cycle integrated degree: EQF level 6/7 ECTS credits will vary across NMC members	Second cycle integrated degree Usually awarding a master's degree. Typical titles at this level: Diploma Engineer (with integrated master) (GR) Ingenieur (ir.) (NL) (<i>prior to 2003.</i>) dipl. Ing. ETH/EPF (CH)	Second cycle integrated equivalent. Examples: The EUR-ACE framework standards.	Second cycle integrated equivalent Examples: By evaluation sheet.

h. Accreditation organizations accepted by the EMC

Engineering programs that hold a formal accreditation of one of the following accreditation agencies can be entered into the EEED database without a separate program evaluation.

ENGINEERS EUROPE MEMBER	HEI Acc	Program Acc	ACCREDITATION ORGANIZATION
 ENGINEERS EUROPE	No	Yes	EMC
 ENGINEERS EUROPE	No	Yes	ENAE EUR ACE
 Austria Österreichisches Nationalkomitee der ENGINEERS EUROPE	Yes	Yes	Bundesministerium für Wissenschaft und Bildung AQ Austria (Agentur für Qualitätssicherung und Akkreditierung Austria)
 Belgium Comité des Ingénieurs Belges - Belgisch Ingenieurscomité	No	Yes	CTI NVAO
 Bulgaria Federation of Scientific Technical Unions in Bulgaria	Yes	Yes	National Evaluation and Accreditation Agency
 Croatia Croatian Engineering Association	Yes	Yes	Croatian Engineering Association
 Cyprus ENGINEERS EUROPE Cyprus National Committee			pending
 The Czech Republic Czech Association of Scientific and Technical Societies	No	Yes	National Accreditation Bureau for Higher Education
 Denmark Ingeniørforeningen i Danmark	Yes (new standard)	Yes (decreasing)	The Danish Accreditation Institution (https://akkr.dk/)
 Estonia Estonian Association of Engineers			pending
 France Ingénieurs et Scientifiques de France	Yes	Yes	CTI
 Germany Deutsches Nationalkomitee der ENGINEERS EUROPE	Yes	Yes	Accreditation Council (supported by ten accreditation agencies responsible for the operative realisation of the accreditation processes)
 Greece Technical Chamber of Greece	Yes	Yes	Hellenic Authority for Higher Education ETHAEE https://www.ethaae.gr/en/
 Hungary Hungarian Chamber of Engineers	Yes	Yes	Hungarian Committee for Accreditation of Higher Education
 Iceland Association of Chartered Engineers of Iceland	No	Yes	(ENGINEERS EUROPE, ABET) No national accred authority
 Ireland Engineers Ireland	No	Yes	QQI (https://qqi.ie)



ENGINEERS EUROPE MEMBER	HEI Acc	Program Acc	ACCREDITATION ORGANIZATION
 Italy Consiglio Nazionale Ingegneri	No	Yes	Quacring
 Kazakhstan Kazakhstan Society of Engineering Education			pending
 Malta Chamber of Engineers			pending
 Netherlands Royal Netherlands Society of Engineers KIVI	No (pilots)	Yes	NVAO
 North Macedonia Engineering Institution of Macedonia	No	No	The Agency for Quality in Higher Education https://www.akvo.mk/
 Norway Norwegian National Committee for ENGINEERS EUROPE	Yes	No	NOKUT
 Poland Polish Federation of Engineering Associations			pending
 Portugal Portuguese National Committee for ENGINEERS EUROPE	Yes	Yes (EUR-ACE)	Ordem dos Engenheiros
 Romania The General Association of Engineers in Romania			pending
 Russia Russian Union of Scientific and Engineering Associations			pending
 Serbia The Union of Engineers and Technicians of Serbia	Yes	Yes	National Entity for Accreditation and Quality Assurance in Higher Education (NEAQA)
 Slovakia Slovak National Committee for ENGINEERS EUROPE			pending
 Slovenia Slovenian National Committee for ENGINEERS EUROPE	Yes	Yes	SQAA (Slovenian Quality Assurance Agency for Higher Education) (nakvis.si)
 Spain Comite Nacional Espanol de la ENGINEERS EUROPE			pending
 Sweden Swedish National Committee for ENGINEERS EUROPE	Yes	Yes	Swedish Council for Higher Education
 Switzerland Schweizer Nationalkomitee für ENGINEERS EUROPE	Yes	optional	AAQ
 Turkey Union of Chamber of Turkish Engineers and Architects			pending
 Ukraine Union of Scientific and Engineering Associations of Ukraine			pending
 United Kingdom British National ENGINEERS EUROPE Committee	No	Yes	Engineering Council

When the accreditation organization is not yet approved by the EMC, the addition can be pursued by the '[Evaluation of Country Education System](#)'.








i. EUR ING SPEC engineering program accreditation through EMC by program evaluation form

When an engineering program is not yet approved by any of the organizations mentioned in section o, the approval can be pursued by using the program evaluation forms:

-  [First cycle degree.](#)
-  [Second cycle degree.](#)

After approval, the program can be entered into the EEED (see [Chapter V](#)).

j. Professional registrations accepted by the EMC for sufficient professional experience

Professional registration accepted by the EMC	ORGANISATION
 Chartered Engineer / Associate Engineer Ireland	Engineers Ireland
 Chartered Engineer / Incorporated Engineer Netherlands	KIVI
 Chartered Engineer / Incorporated Engineer United Kingdom	Engineering Council
 REG A / REG B / REG C Switzerland	SIA, Swiss Engineering, etc.
 Ingenieur [Ing.] Austria	BMBWF, BFI, WIFI etc.

Note: some registrations can be temporarily whilst others can be permanent, depending on national regulations.

k. Tool to check for possible protection of engineering titles in EU Countries

The tool to check for possible protection of engineering titles in EU Countries is the following:





<https://ec.europa.eu/growth/tools-databases/regprof/index.cfm?action=homepage>



l. Monitoring the quality of national educational systems

An **EMC working group**, consisting of 2-3 EMC members, will evaluate every five years the educational system in the country and the working procedures of the NMC.

The written report includes:

-  a brief description of the educational system in the country
-  a description of the QA system and accreditation procedures in place
-  a description of the workflow used in NMCs to update the INDEX
-  a recommendation to EMC

The report template to be used for this is: [Template 'Evaluation of Country Education System'](#)





In the exceptional case, the EMC WG will need to visit the NMC according to an agreed agenda, in which case all expenses of the Working Group will have to be arranged by the respective National Member.



m. Recommendation for procedure for handling complaints about EUR ING

Complaints are broadly defined. They may include unethical and/or unprofessional practices as an engineer, failure to comply with EUR ING requirements such as the maintenance of CPD, nonpayment of fees, etc.

If ENGINEERS EUROPE receives a complaint from a third party regarding EUR ING:

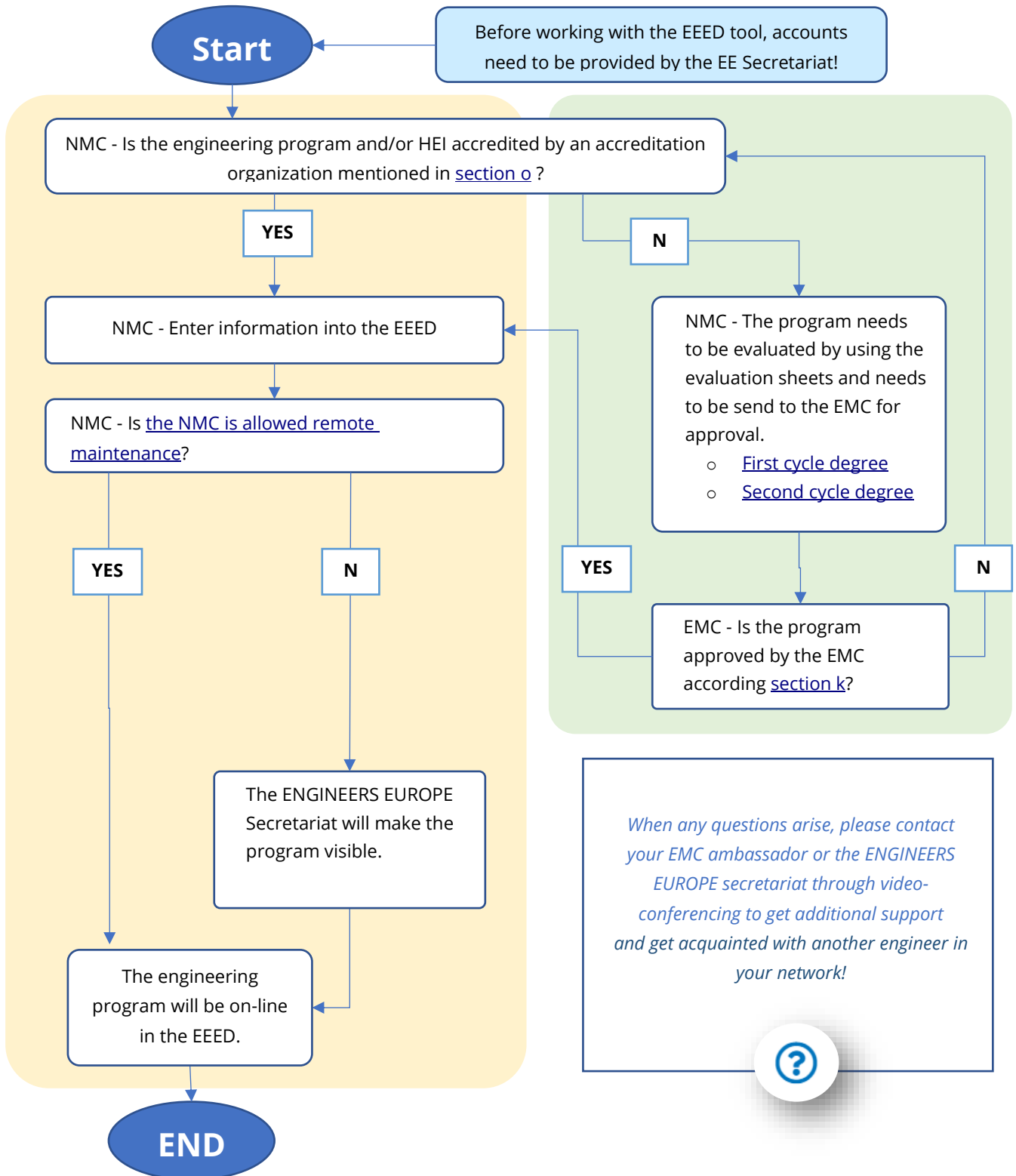
1. The Secretary General should first verify whether the concerned EUR ING was registered on a national basis in a country such as the UK (Chartered Engineers). In this case, the national body could take appropriate steps/disciplinary measures.
2. If this is not the case the following procedure applies. The Secretary General will :
 -  send a copy of the complaint to the EMC Chair and the respective NMC;
 -  reply to the complainer
 -  inform the concerned EUR ING that a complaint has been made and include a copy of the response but without sending the actual complaint and request a written response to the complaint.
 -  The disciplinary measures of the respective NMC will be applied and/or escalated to the ENGINEERS EUROPE Secretariat for final resolution if necessary

In any case, close consultation with the respective NM/NMC is vital. The communication with the concerned EUR ING and complainer will generally be made through ENGINEERS EUROPE.



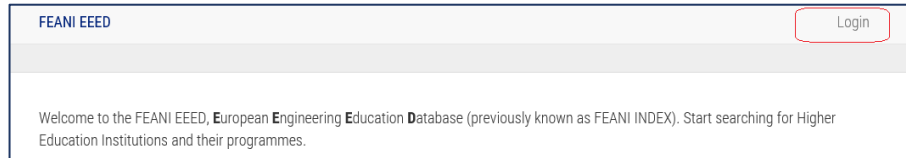
IV. Submissions of engineering programs and HEI to the EEED

n. Basic workflow entering information into the EEED by the NMC



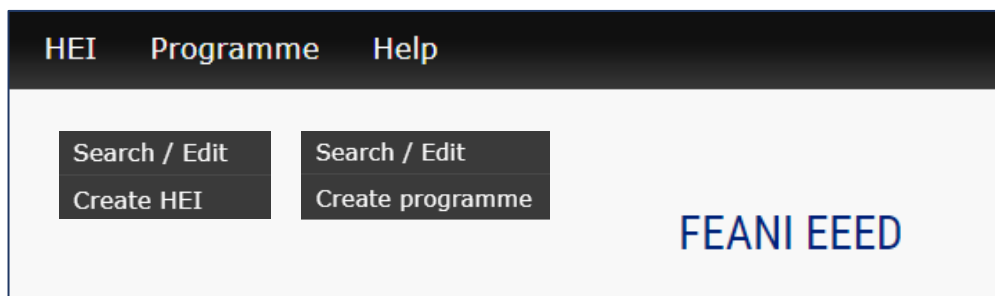
EMC and NMC members require an account to modify the contents of the EEED database. To the applicable people an account will be provided by the ENGINEERS EUROPE Secretariat.

<https://www.engineerseurope.com/eed-database>



The screenshot shows the FEANI EEED login page. At the top left, it says "FEANI EEED". At the top right, there is a "Login" button. Below the header, there is a welcome message: "Welcome to the FEANI EEED, European Engineering Education Database (previously known as FEANI INDEX). Start searching for Higher Education Institutions and their programmes."

Select the applicable menu options in the top left corner of the screen and proceed.



The screenshot shows the FEANI EEED main menu. At the top, there are three tabs: "HEI", "Programme", and "Help". Below the tabs, there are two buttons: "Search / Edit" and "Create HEI" under the "HEI" tab, and "Search / Edit" and "Create programme" under the "Programme" tab. The "FEANI EEED" logo is displayed on the right side of the menu.

*A * asterisk indicates it's a mandatory field to be filled in.*

The question mark signs in the screens gives additional support.



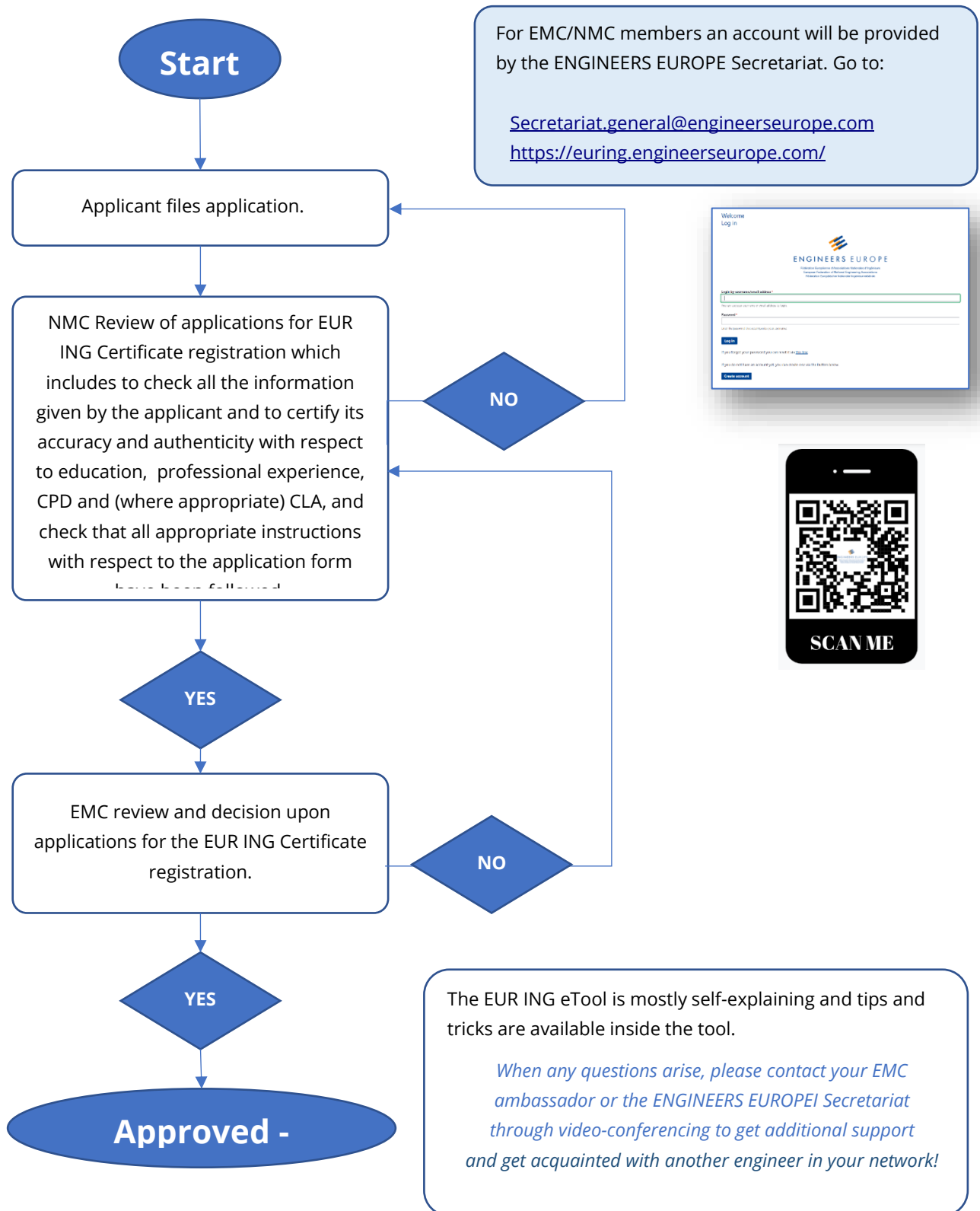
o. Special workflow exceptional cases

In exceptional cases (inclusion of programmes from a new ENGINEERS EUROPE Member; new types of programmes; ...) and submissions above the amount of 7 programmes combined with no remote maintenance permission of the member country, the EMC nominates a Working Group (WG) that will select a representative sample of 7 programmes for which programme evaluation sheets will be asked from the NMCs. This is being done to make the work manageable.

In the exceptional case, the EMC WG will need to visit the NMC according to an agreed agenda, in which case all expenses of the Working Group will have to be arranged by the respective National Member.



V. EUR ING Certificate eTool workflow tutorial





VI. Abbreviations and Definitions

CLA	Career Learning Assessment
CPD	Continuing Professional Development, timely personal development in technical and non-technical topics.
Competence	The knowledge, skills, and attitude needed to perform a specific task in a specific environment.
Course	An assembly of lectures, tutorials, and other learning environments in which one or more subjects are studied
EB	ENGINEERS EUROPE Executive Board
ECTS	European Credit Transfer System ³
Education	Learning leading to a diploma in an engineering program, provided by a university or another establishment of higher education, accepted by ENGINEERS EUROPE.
EE	ENGINEERS EUROPE
EEED	List of Higher Education Institutions (HEI) and Engineering Programs recognized by ENGINEERS EUROPE
EEED Procedures	EMC Procedures to analyse proposals from National Members
EHEA	European Higher Educational Area ⁴
EMC	ENGINEERS EUROPE European Monitoring Committee
ENIC-NARIC	European network of national agencies for the recognition of foreign university diplomas ⁵
EUR-ACE	Certification of European Engineering Programs by ENAEE ⁶
EUR ING	Registered trademark.
EQF	European Qualification Framework ⁷
FCD	First Cycle Degree
GA	ENGINEERS EUROPE General Assembly
HEI	Higher Education Institution
National engineering associations	This includes institutions, societies, and associations.
NM	National Member
NMC	National Monitoring Committee
Professional Engineering Experience	Continuous Learning gained during working life after the completion process by current development in engineering and particularly specialism. CPD can be acquired in a variety of ways through seminars, meetings, discussions, further study, etc.
Program	An assembly of courses leading to an award in recognition of the satisfactory completion of the program.

³ https://ec.europa.eu/education/resources-and-tools/european-credit-transfer-and-accumulation-system-ects_en

⁴ <http://www.ehea.info/>

⁵ <https://www.enic-naric.net/>

⁶ <https://www.enaee.eu/>

⁷ <https://europa.eu/europass/en/european-qualifications-framework-eqf>



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SCD	Second Cycle Degree
SCI	Second Cycle Integrated Degree
Subject	A topic or area of study. For example, Mathematics, Technical Drawing, Chemistry, etc.
VET	Vocational Education and Training, as the third pillar besides scientific universities and universities of Applied Science
WG	Working Group

VII. References

These appendices give some extra information for current and future readers.

p. Worldwide quality alignment of engineering programs

There are two main public processes according to which the quality of engineering programs are aligned:

The [Bologna process](#) is a series of ministerial meetings and agreements between European Countries to ensure comparability in the standards and quality of higher-education qualifications. The process has created the European Higher Education Area (EHEA) under the Lisbon Recognition Convention. It is named after the University of Bologna, where the Bologna declaration was signed by education ministers from 29 European Countries in 1999. The process was opened to other countries in the European Cultural Convention of the Council of Europe, and governmental meetings have been held in Prague (2001), Berlin (2003), Bergen (2005), London (2007), Leuven (2009), Budapest-Vienna (2010), Bucharest (2012), Yerevan (2015), Paris (2018), and Rome (2020).

The [Washington accord](#) is an international accreditation agreement for undergraduate professional engineering academic degrees between the bodies responsible for accreditation in its signatory countries and regions. Established in 1989, the full signatories as of 2020 are Australia, Canada, China, Costa Rica, Hong Kong, India, Ireland, Japan, Korea, Malaysia, New Zealand, Pakistan, Peru, Philippines, Russia, Singapore, South Africa, Sri Lanka, Taiwan, Turkey, the United Kingdom, and the United States.

Diplomas from outside the ENGINEERS EUROPE area (EHEA) can be recognized by a European host country according to the [ENIC-NARIC](#) agreement, as authorized by the respective national ministry of education. For the EHEA (most ENGINEERS EUROPE members) states the Bologna process is followed.

In some member states the institutes are accredited, incl. the authority to issue study programs on their own, in other member states only the programs are accredited (incl. stakeholder feedback and quality assurance). In addition, private accreditations can be proof of the quality of engineering programs. At the moment the EUR-ACE accreditation of [ENAE](#) is accepted by ENGINEERS EUROPE.

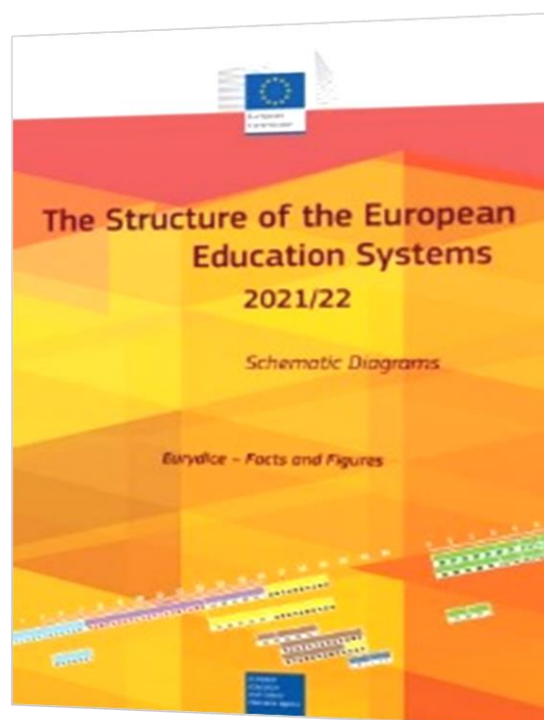


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q. Structure of the European Education System

See the link for more information on an excellent visualisation of the structure of the European Education System.

https://eacea.ec.europa.eu/national-policies/eurydice/content/structure-european-education-systems-202122-schematic-diagrams_en



r. European workload frameworks: ECTS

ENGINEERS EUROPE has adopted the **European Credit Transfer System (ECTS)**⁸ to quantify and measure the workload expected from a student to pass a subject. According to ECTS, one full-time academic year of studies corresponds to 60 credits and credits embrace the full student workload, including classes, individual work, and exams.

In general 1 ECTS is equivalent to a workload of 25 to 30 hours and 60 ECTS is equivalent to a workload of 1680 hours (based on the EMC assumed workload of 28 hours).

The Framework for **Qualifications of the European Higher Education Area (EQF)**⁹ provides descriptors for three cycles agreed by the ministers responsible for higher education. Each cycle descriptor offers a generic statement of typical expectations of achievements and abilities associated with qualifications that represent the end of that cycle.

The descriptor for the first cycle, usually awarding a bachelor's degree, corresponds to the learning outcomes for EQF level 6.

The descriptor for the second cycle, usually awarding a master's degree, corresponds to the learning outcomes for EQF level 7.

Note that a PhD (EQF level 8) is recognized as professional research experience including CPD.

The route mostly used for the EUR ING starts with a secondary education (level 5), granting a general or a specific admission to tertiary education. However, countries with a fully developed **vocational qualification path (VET)** may have higher technical schools, which are also considered tertiary education on level 6 (equivalent to 120 ECTS) and award a diploma as technologist. After 3 or more years in professional practise, technologists may earn the title engineer by passing a state examination or similar recognition procedure. Some national qualification frameworks may even foresee a VET examination of level 7 (e.g. as a construction supervisor or other senior technologist).

⁸ https://ec.europa.eu/education/resources-and-tools/european-credit-transfer-and-accumulation-system-ects_en

⁹ <https://europa.eu/europass/en/european-qualifications-framework-eqf>



Some member countries within the European Higher Education Area have different scales from which the following picture is taken:

Correspondences between UK and Irish frameworks with European qualifications frameworks

Within Europe, two overarching qualifications frameworks exist to which the national qualifications frameworks of the UK and Ireland relate: The European Qualifications Framework (EQF) and the Framework for Qualifications of the European Higher Education Area (FQ-EHEA) also known as the Bologna Framework.

Table 1 shows the correspondence of levels established between national qualifications frameworks and the EQF:

European Qualifications Framework (EQF)	Framework for Higher Education Qualifications in England/ Northern Ireland (FHEQ)	Regulated Qualifications Framework England/ Northern Ireland (RQF)	Credit and Qualifications Framework for Wales (CQFW)	Scottish Credit and Qualifications Framework (SCQF)	The National Framework of Qualifications for Ireland (NFQ IE)
8	8	8	8	12	10
7	7	7	7	11	9
6	6	6	6	10/9	8/7
5	5/4	5/4	5/4	8/7	6
4		3	3	6	5
3		2	2	5	4
2		1	1	4	3
1		E3	E3	3	2/1
		E2	E2	2	
		E1	E1	1	

Table 2 shows the outcome of verifying the compatibility of higher education frameworks for Scotland (FQHEIS/SCQF), for England, Wales and Northern Ireland (FHEQ) and for the NFQ for Ireland (NFQ IE) with the FQ-EHEA as follows:

Typical higher education qualifications within each level	FHEQ level	FQHEIS/ SCQF level	NFQ IE level	Corresponding FQ-EHEA cycle
Doctoral degrees	8	12	10	Third cycle (end of cycle) qualifications
Master's degrees (including Integrated Master's)	7	11	9	Second cycle (end of cycle) qualifications
Postgraduate diplomas				Intermediate qualifications within the second cycle
Postgraduate certificates				
Bachelor's degrees with honours /Honours Bachelor Degrees	6	10	8	First cycle (end of cycle) qualifications
Irish Higher Diplomas				
Bachelor's degrees/ Ordinary Bachelor Degree		9	7	Intermediate qualifications within the first cycle
Graduate diplomas				
Graduate certificates				
Foundation Degrees (for example FdA, FdSc)	5	8	6	Short cycle qualifications
Diplomas of Higher Education (DipHE)				
Higher National Diplomas (HND)				
Irish Higher Certificates	4	7		Intermediate qualifications within the short cycle
Higher National Certificates (HNC)				
Certificates of Higher Education (CertHE)				

For more information on compatibility with these frameworks see: http://ec.europa.eu/eqf/home_en.htm and www.enic-naric.net.

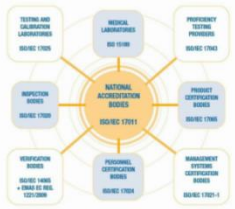
s. Accreditation in the European Union

Caused by the abundant (mis)use of many non-transparent quality markings/logos/certificates by organizations/companies in the past, in 2008 the EU came up with <https://european-accreditation.org/>:

European Accreditation System

Definition of Accreditation (Regulation 765/2008)

Accreditation shall mean an attestation by a national accreditation body that a conformity assessment body meets the requirements set by harmonised standards and, where applicable, any additional requirements including those set out in relevant sectoral schemes, to carry out a specific conformity assessment activity.



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*BE AWARE, this is about the 'conformity assessment **bodies**', not about the quality markings/ logos/ certificates themselves!*

Awarding the EUR ING Certificate will be a process of 'conformity assessment'. Many high-tech companies and quality companies already have an accreditation based on 765/2008.

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HAA, Croatia	ACCREDIA, Italy	ATS, Serbia
CYS-CYSAB, Cyprus	LATAK, Latvia	SNAS, Slovakia
CAI, Czech Republic	LA, Lithuania	SA, Slovenia
DANAK, Denmark	OLAS, Luxembourg	ENAC, Spain
EAK, Estonia	IARM, Macedonia	SWEDAC, Sweden
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