



## **QUACING Agency**

Agency for the Quality Certification and  
EUR- ACE Accreditation of Engineering Study Programmes

# **QUACING Documentation File**

***Rev. 0***

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## **QUACING Documentation File**

The QUACING Documentation File presents all the information and data required by the *QUACING Standards and Guidelines for EUR-ACE Accreditation of Engineering Study Programmes (QUACING Model)* in order to provide evidence of the quality – and therefore to assure the quality – of the educational service offered by an Engineering Study Programme (ESP).

The *QUACING Documentation File* is a document necessary in order to access the EUR-ACE accreditation process according to the QUACING approach, together with the *QUACING Review Report*.

# QUACING Documentation File Template

Institution ...

## Documentation for the EUR-ACE Accreditation of the Engineering Study Programme

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### Documentation File

<b>General Information on Study Programme</b>
<b>Study Programme</b> <i>(Indicate the full name (i.e. no acronyms) of the ESP. If the name is not in Latin alphabet, provide a transliteration or transcription. In addition, provide also an English translation (if applicable) in italics. If there is an official English translation available, use the official one)</i> ...
<b>Cycle /Level</b> <i>(Indicate the cycle/level of the qualification according to the National Qualifications Framework (where available), the QF for EHEA and the EQF for LLL)</i> ...
<b>Type of Degree &amp; Duration</b> <i>(Identify the type of degree, for example whether the degree is the result of a programme offered by a single institution or whether the degree is the result of a joint programme (joint degree or double / multiple degree). Indicate the duration of the ESP in ECTS-credits, and/or - if applicable - national/institutional credits and/or years of study)</i> ...
<b>Fulfilment of national norms and requirements</b> <i>(Declare whether the ESP fulfils all the national norms and requirements)</i> ...
<b>Accreditation Organisation(s) and Period of validity</b> <i>(Identify the accreditation organisation(s) that provides the accreditation of the ESP or the degree awarding institution and the country in which the accreditation organisation operates. Identify the year(s) for which the ESP is validated/approved)</i> ...
<b>Purpose</b> <i>(Provide, in a few sentences, a summary - a 'synthetic view'- of the overall purpose of the programme)</i> ...
<b>Discipline(s) / Subject area(s)</b> <i>(Indicate the main discipline(s) / subject area(s) of the ESP.</i>

If the programme is multi- or interdisciplinary, indicate the relative weight of the major components, if applicable (for instance: politics, law and economics - 60:20:20)

...

### General / Specialist Focus

(Indicate whether the degree is aimed towards a more general academic education or a specialism, or a combination of the two. A general ESP focuses on the breadth of the subject area(s). A specialist programme focuses in greater depth on a particular subject or subjects. In many cases, there could be a combination. For example: a programme in international relations might be broad but also be focussed, for instance, on a particular region or subject, or problem such as conflict resolution. Specify and provide a short description of the general and/or specialist focus of the ESP. If the ESP includes a specialism, please provide a brief statement of the specialism(s))

...

### Orientation

(Outline the orientation of the ESP. For example: whether the degree is primarily research, practically based, professional, applied, related to designated employment, etc.)

...

### Teaching & Learning Methods

(Indicate in few lines the main teaching and learning methods  
Examples of teaching and learning methods are: lectures, problem based teaching&learning, learning through laboratory practice, reflective learning, work placements, group work, individual study and autonomous learning, etc.)

...

### Assessment Methods

(Indicate in few lines the main assessment methods in the programme. Examples of assessment methods are: oral and written essays, oral presentations, reports, project work, case studies, etc )

...

### Distinctive Features

(Indicate, in a few sentences, any additional features that distinguish this ESP from other similar ESPs. For example: if the programme includes a compulsory international component, a work placement, a specific environment or is taught in a second language)

...

## Standard A - Programme Aims

The engineering study programme should identify the educational needs of the labour market of reference and other stakeholders, establish programme educational objectives coherent with the mission of the institution the study programme belongs to and the identified educational needs, and programme learning outcomes coherent with the established programme educational objectives.

### Quality Requirement A1 - Educational needs of the labour market and other stakeholders

The engineering study programme should identify the educational needs of the labour market of reference and other stakeholders.

### Organisations/employers and other stakeholders consulted and Methods and schedule of consultation

(List the organisations representative of the production, services and professions world and/or the employers and the other stakeholders consulted in order to identify their educational needs.  
List the consultations method/s and schedules.  
Provide only information properly documented.)

...

### Identified educational needs of the labour market and other stakeholders

<p>(List the identified educational needs of the labour market of reference of the other stakeholders and make available the document where they are registered)</p> <p>...</p>
<p><b>Quality Requirement A2 - Programme educational objectives</b></p> <p>The engineering study programme should define programme educational objectives consistent with the mission of the institution the study programme belongs to and the identified educational needs.</p>
<p><b>Programme educational objectives</b></p> <p>(List the established programme educational objectives. List the main areas in which graduates can find employment and the level of responsibility they are qualified to take. For first cycle programmes indicate also the second cycle ESPs in which the first cycle graduates can continue their studies. Provide only information properly documented.)</p> <p>...</p>
<p><b>Quality Requirement A3 - Programme learning outcomes</b></p> <p>The engineering study programme should define programme learning outcomes, in terms of what students are expected to know, understand and/or be able to demonstrate after completion of the educational process, consistent with the national qualification framework, if any, the established programme educational objectives and the programme learning descriptors for ESPs.</p>
<p><b>Programme learning outcomes</b></p> <p>(List the programme learning outcomes. Provide only information properly documented.)</p> <p>...</p> <p><b>Coherence with the programme learning descriptors for ESPs</b></p> <p>(Document the coherence of the programme learning outcomes with the programme learning descriptors for ESPs, providing evidence of the programme learning outcomes corresponding to each programme learning descriptor. To this end, the table shown in Annex A3.a of the QUACING Model can be used.</p> <p style="text-align: center;"><i>Alternatively</i></p> <p>Document the coherence of the ESP curriculum with the programme learning descriptors for ESPs, providing evidence of the course units that contributes to the fulfilment of each programme learning descriptor. To this end, the table shown in Annex 3.b can be used.)</p> <p>...</p>

<p><b>Standard B - Educational process</b></p>
<p>The engineering study programme should assure students educational activities consistent with the national standards, if any, and able to achieve the established programme learning outcomes through contents, methods, workload and times adequately designed and planned, promote a student-centred teaching and learning approach, assure a correct assessment of students' learning through suitable assessment methods and criteria. The engineering study programme should also define appropriate rules covering student admission, recognition, progression and attestation and keep under control the development of the educational process.</p>
<p><b>Quality Requirement B1 - Design of the educational process</b></p> <p>The engineering study programme should design a curriculum and characteristics of the course units and of the graduation exam consistent with the national standards, if any, and the established programme learning outcomes. The curriculum should embed a student-centred teaching and learning approach. The engineering study programme should also define assessment methods and criteria able to ensure a correct assessment of the students' learning.</p>
<p><b>Curriculum</b></p>

*(Describe synthetically the structure and the characteristics of the curriculum and provide the curriculum with at least the list of the course units, their sequence (year and semester of delivery), the number of ECTS credits<sup>11</sup> associated at each unit and the unit lecturer. Indicate also the body/ies that approve the curriculum. Provide only information properly documented.)*

...

### **Characteristics of the course units**

*(Describe how the ESP coordinates the definition of the characteristics of the course units and make available the forms which describe the characteristics of the course units. Provide only information properly documented.)*

...

### **Characteristics of the graduation examination**

*(Describes the characteristics of the graduation examination. Provide only information properly documented.)*

...

### **Suitability of the curriculum to the achievement of the programme learning outcomes**

*(Document the suitability of the curriculum to the achievement of the expected programme learning outcomes.)*

...

### **Quality Requirement B2 - Admission, recognition, progression and attestation**

The engineering study programme should establish rules covering all phases of the student 'life cycle', and in particular student admission, recognition, progression and attestation.

#### **Admission**

*(Provide the required qualifications and the established requirements and criteria for the admission to the ESP, the methods of assessment of the possession of the admission requirements by students. Provide only information properly documented.)*

...

#### **Recognition**

*(Provide the rules established for the recognition of higher education qualifications, periods of study and prior learning. Provide only information properly documented.)*

...

#### **Progression**

*(Provide the established management criteria of the students' progression in their studies. Provide only information registered in official documents.)*

...

#### **Attestation**

*(Make available the documentation provided to graduates after the completion of their studies. Provide only information properly documented.)*

...

### **Quality Requirement B3 - Planning of the educational process**

The engineering study programme should plan the development of the educational process in order to enable students to achieve the programme learning outcomes in the expected time, according to a gradual process and through coherent and coordinated educational activities.

## Calendar and timetable of course units and examinations

*(Make available the:*

- calendar and timetable of the course units,
- calendar of the examinations, graduation examination included, and composition of the examination commissions.

*Provide only information approved by the ESP.)*

...

## Quality Requirement B4 - Management of the educational process

The engineering study programme should manage the educational process coherently with the designed and planned development and keep under control its development, in order to resolve any urgent and immediate problem and to check the adequacy of the assessment tests and of the final work/thesis to the achievement of the established learning outcomes specific of the course units and the correctness of the evaluation of the students' learning.

### Control of the development of the educational process

*(Describe how the ESP keeps under control the development of the educational process, in order to check its correspondence with the designed and planned development, and resolves the urgent and immediate problems, and document the results of the control at least for the last academic year.)*

...

### Control of the assessment tests and of the final work/thesis

*(Describe how the ESP keeps under control the assessment tests and the final work/thesis, in order to check their adequacy to the assessment of the achievement of the learning outcomes specific of the course units and of the final work/thesis by students and the correctness of the evaluation of the students' learning, and document the results of the control at least for the last academic year.)*

...

## Standard C - Resources

The engineering study programme should have at disposal teaching staff, facilities, financial resources, student support services and partnerships adequate to the achievement of the learning outcomes and able to make easier the students' progression in their studies.

### Quality Requirement C1 - Teaching staff

The study programme should have at disposal teaching staff, including teaching support staff, quantitatively and qualitatively adequate for the achievement of the established learning outcomes by students. The teaching staff should be appointed according to pre-definite criteria of recruiting/selection/choice and the programme should offer the teaching staff the opportunity to improve their teaching skills and the use of new technologies.

#### Teaching staff

*(List the ESP teaching staff and provide at least the following information for each lecturer:*

- academic or professional qualification;
- list of the ESP course units he/she is in charge of.

*Document the recruiting/selection/choice criteria for appointment of the teaching staff. Provide only information properly documented.*

*Make available the CV of each lecturer, with the description of the scientific and/or professional interests, activities and results.*

*Provide the information about the opportunities offered to the teaching staff for improving their teaching skills and the use of new technologies and achieving acceptable standards.)*

...

#### Teaching support staff

*(For each course unit which utilises support teachers, make available the list of the support teachers and provide at least the following information for each of them:*

- qualification;
  - total number of hours of didactic workload;
  - duties (e.g.: practical training, lab assistance, etc.).
- Document the recruiting/selection/choice criteria for appointment of the teaching support staff.  
Provide only information properly documented.)

...

## **Quality Requirement C2 - Facilities and support staff**

The engineering study programme should have at disposal facilities (lecture and study rooms, laboratories, libraries), with the associated equipment, and technical-administrative staff quantitatively and qualitatively adequate for the development of the established educational activities as designed and planned and able to allow the application of the established educational methods.

### **Lecture rooms**

*(List the lecture rooms utilised by the ESP and provide at least the following information for each of them:*

- number of seats;
- supply of audio-visual equipment;
- availability of web connection;
- surveillance/assistance staff, their qualification and duties)

...

### **Study rooms**

*(List the rooms for individual studies utilised by the students and provide at least the following information for each of them:*

- number of seats;
- availability of web connections;
- opening time and access rules;
- surveillance/assistance staff, their qualification and duties)

...

### **Laboratories**

*(List the laboratories (PC rooms included) utilised by the ESP and provide at least the following information for each of them:*

- equipment and/or personal computers and software of interest for the educational activities of the ESP available;
- number of workplaces and number of students for workplace;
- access rules;
- technical staff, their qualification and duties.)

...

### **Libraries**

*(List the libraries utilised by the students of the ESP and provide at least the following information for each of them:*

- availability of updated bibliographical material of interest for the educational activities of the ESP;
- availability of web connections;
- services offered (consultation of books and journals, book rent, bibliographical researches, access to data bases, etc.);
- opening time and access rules;
- librarian staff, their qualification and duties)

...

### **Other resources and special initiatives**

*(List other resources at disposal of the ESP and special initiatives undertaken by the ESP or the structure it belongs to)*

...

## **Quality Requirement C3 - Financial resources**

The engineering study programme should have at disposal financial resources adequate for the development of the educational process according to the designed and planned activities.



### **Needs of financial resources**

*(Document the needs of financial resources, subdivided according to the expense typologies. Provide only information properly documented.)*

...

### **Availability of financial resources**

*(Document the availability of financial resources and indicate at least:*

- *financing bodies;*
- *amount of the financial resources put at disposal;*
- *subdivision of the available financial resources according to the expense typologies.*

*Provide only information properly documented.)*

...

### **Quality Requirement C4 - Student support services**

The engineering study programme should have at disposal student support (orientteering, tutoring and assistance) services relevant to the educational process and able to make easier students' learning and progression in their studies.

#### **Student administrative office**

*(Make available the following information at least:*

- *office organisation and management;*
- *activities in charge of the office;*
- *administrative staff, their qualification and duties;*
- *activities and results of the last academic year at least.)*

...

#### **Orientteering service for incoming students**

*(Make available the following information at least:*

- *service organisation and management;*
- *activities in charge of the service;*
- *administrative staff, their qualification and duties;*
- *activities and results of the last academic year at least.)*

...

#### **Tutoring service**

*(Make available the following information at least:*

- *service organisation and management;*
- *activities in charge of the service;*
- *administrative staff, their qualification and duties;*
- *activities and results of the last academic year at least.)*

...

#### **Service for carrying out training periods outside University**

*(Make available the following information at least:*

- *service organization and management;*
- *activities in charge of the service;*
- *administrative staff, their qualification and duties;*
- *activities and results of the last academic year at least.)*

...

#### **International mobility service**

(Make available the following information at least:

- service organisation and management;
- activities in charge of the service;
- administrative staff, their qualification and duties;
- activities and results of the last academic year at least.)

...

### **Job placement service**

(Make available the following information at least:

- service organisation and management;
- activities in charge of the service;
- administrative staff, their qualification and duties;
- activities and results of the last academic year at least.)

...

### **Quality Requirement C5 - Partnerships**

The engineering study programme should have partnerships with national and/or international businesses, research institutions and other Higher Education Institutions quantitatively and qualitatively adequate for carrying out students' external education and international mobility.

#### **Partnerships for carrying out training periods outside University**

(Make available the list of the active partnerships for carrying out training periods outside the University and for each partnership the number of students who have carried out training periods in the body in consideration in the last three academic or solar years at least.

To this aim, the table of Annex C5.1 of the QUACING Model can be used.)

...

#### **Partnerships for carrying out international mobility periods**

(Make available the list of the active partnerships for carrying out students' international mobility periods and for each partnership the number of students, in exit and in entrance, who have carried out periods of mobility in the Institution in consideration in the last three academic or solar years at least.

To this aim, the table of Annex C5.2 of the QUACING Model can be used.)

...

## **Standard D - Monitoring**

The engineering study programme should monitor the results of the educational process, at least with respect to incoming students, students' progression in their studies, students' learning, graduates' placement, students' feedback on the educational process and employed graduates' and employers' feedback on the graduates' education, in order to check the adequacy and effectiveness of the educational service provided.

### **Quality Requirement D1 - Incoming students**

The engineering study programme should monitor the incoming students in order to check its attractiveness.

#### **Enrolments in the first course year**

(Make available the data relative at least at the last three cohorts for which full surveys are available required by:

- Table D1\_B of Annex D1 of the QUACING Model for Bachelor Degree programmes;
- Table D1\_M of Annex D1 of the QUACING Model for the Master Degree programmes; of Annex D1 of the QUACING Model.)

...

### **Quality Requirement D2 - Students' progression in their studies**

The engineering study programme should monitor the students' progression in their studies in order to check the effectiveness of the educational process.

#### **Enrolments in the different course years**

<p>(Make available the data relative at least at the last three cohorts for which full surveys are available required by:</p> <ul style="list-style-type: none"> <li>• Table D2.1_B of Annex D2 of the QUACING Model for Bachelor Degree programmes;</li> <li>• Table D2.1_M of Annex D21 of the QUACING Model for Master Degree programmes; of Annex D2 of the QUACING Model.)</li> </ul> <p>...</p> <p><b>Graduation time</b></p> <p>(Make available the data relative at least at the last three cohorts for which full surveys are available required by:</p> <ul style="list-style-type: none"> <li>• Table D2.2_B of Annex D2 of the QUACING Model for Bachelor Degree programmes;</li> <li>• Table D2.2_M of Annex D2 of the QUACING Model for Masters Degree programmes; of Annex D2 of the QUACING Model.)</li> </ul> <p>...</p>
<p><b>Quality Requirement D3 - Students' learning</b></p> <p>The engineering study programme should monitor the students' learning in order to check the effectiveness of the course units.</p>
<p><b>Students' learning</b></p> <p>(Make available the data relative at least at the last three cohorts for which full surveys are available required by Table D3 of Annex D3 of the QUACING Model.)</p> <p>...</p>
<p><b>Quality Requirement D4 - Students' feedback on the educational process</b></p> <p>The engineering study programme should monitor the students' feedback on the educational process in order to check the perceived adequacy and effectiveness.</p>
<p><b>Students' feedback on the course units</b></p> <p>(Describe the monitoring instrument and schedule of the students' feedback on the course units and make available the monitoring questionnaire and the results relative to both the single course units and all the course units of the curriculum at least for the last three cohorts for which full surveys are available.)</p> <p>...</p>
<p><b>Students' feedback on the training periods outside University</b></p> <p>(Describe the monitoring instrument and schedule of the students' feedback on the training periods outside University and make available the monitoring questionnaire and the results at least for the last three cohorts for which full surveys are available.)</p> <p>...</p>
<p><b>Students' feedback on the periods of international mobility</b></p> <p>(Describe the monitoring instrument and schedule of the students' feedback on the periods of international mobility and make available the monitoring questionnaire and the results at least for the last three cohorts for which full surveys are available.)</p> <p>...</p>
<p><b>Feedback of the final year students on educational process and support services</b></p> <p>(Describe the monitoring instrument and schedule of the final year students' feedback on the educational process and on the student support services and make available the monitoring questionnaire and the results at least for the last three cohorts for which full surveys are available.)</p> <p>...</p>
<p><b>Quality Requirement D5 - Graduates' placement</b></p> <p>The engineering study programme should monitor the graduates' placement in order to check the demand of the granted qualification and the correspondence of the programme educational objectives and programme learning outcomes to the educational needs of the labour market.</p>
<p><b>Graduates' job placement</b></p>

*(Describe the monitoring instrument and schedule of the graduates' job placement and make available at least the following monitoring results:*

- *percentage of employed graduates;*
- *placement time in the labour market;*
- *effectiveness of the degree in the working activity*

*after 1=3 years since graduation at least for the last three cohorts for which full surveys are available.)*

...

#### **Prosecution of the studies in the second cycle programmes** *(only for first cycle graduates)*

*(Make available the results relative to the first cycle graduates who prosecute their studies in second cycle ESPs after 1 year from the graduation at least for the last three cohorts for which full surveys are available.)*

...

#### **Prosecution of the studies in PhD programmes** *(only for second cycle graduates)*

*(Make available the results relative to the second cycle graduates who prosecute their studies in PhD programmes after 1 year from the graduation at least for the last three cohorts for which full surveys are available.)*

...

#### **Quality Requirement D6 - Employed graduates' and employers' feedback on the graduates' education**

The engineering study programme should monitor the employed graduates' and employers' feedback on the graduates' education in order to check the correspondence of the programme educational objectives and programme learning outcomes to the educational needs of the labour market.

##### **Employed graduates' feedback on the education received**

*(Describe the monitoring instrument and schedule of the employed graduates' feedback on the education received and make available the monitoring questionnaire and results (also with reference to the number of graduates involved in the monitoring) at least for the last three cohorts for which full surveys are available.)*

...

##### **Employers' feedback on the graduates' education**

*(Describe the monitoring instrument and schedule of the employers' feedback on the graduates' education and make available the monitoring questionnaire and results (also with reference to the number of employers involved in the monitoring).)*

...

### **Standard E - Management system**

The institution the engineering study programme belongs to should have a public policy and appropriate processes and organization for the quality assurance of study programmes. The policy should be put into practice through the definition and adoption of a management system of the study programmes, able to assure their quality and the continual improvement of the effectiveness of the processes for the study programme management and of the associated results.

#### **Quality Requirement E1 - Policy, processes and organization of the Higher Education Institution for the quality assurance of study programmes**

The institution the engineering study programmes belongs to should have a public policy and appropriate processes and organization for the quality assurance of study programmes.

##### **Policy for quality assurance**

*(Make available the document/s where mission, vision of the quality of SPs and policy for the QA of ESPs of the institution the ESP belongs to are registered.)*

...

<p><b>Processes and organization for the quality assurance of ESPs</b></p> <p><i>(Describe the processes for the quality assurance of ESPs managed by the institution the ESP belongs to. List the positions of responsibilities for the QA of ESPs of the institution the ESP belongs to and make available at least the following information for each position of responsibility identified:</i></p> <ul style="list-style-type: none"> <li>• composition (only in case of positions of responsibility composed by more people);</li> <li>• duties.</li> </ul> <p><i>For this purpose, the table of Annex E1.1 of the QUACING Model could be used. Provide also the timetable for the revision of the policy, processes and organization for the QA of ESPs. Provide only information properly documented.)</i></p> <p>...</p>
<p><b>Quality Requirement E2 - Management system of the study programme</b></p> <p>The engineering study programme should implement an appropriate management system, through the identification of the quality assurance processes and the definition of a relevant organisational structure.</p>
<p><b>Management system of the study programme</b></p> <p><i>(List the processes for the ESP management and the responsibilities for their management. For this purpose, a 'responsibility matrix' as the one proposed in Annex E2.1 of the QUACING Model could be used, with the indication for each identified process or sub-process of:</i></p> <ul style="list-style-type: none"> <li>• the responsible of the process/sub-process;</li> <li>• the position/s of responsibility collaborating in the process/sub-process management (optional);</li> <li>• the document/s where the activities and/or the results of the process/sub-process under consideration are registered.</li> </ul> <p><i>List the positions of responsibilities for the ESP management and make available at least the following information for each position of responsibility identified:</i></p> <ul style="list-style-type: none"> <li>• composition (only in case of positions of responsibility composed by more people);</li> <li>• duties.</li> </ul> <p><i>For this purpose, the table of Annex E2.2 of the QUACING Model could be used. Provide also the timescales for the implementation of the processes for the ESP management. Provide only information properly documented.)</i></p> <p>...</p>
<p><b>Quality Requirement E3 - Review</b></p> <p>The engineering study programme should periodically review the processes for the study programme management and the associated results, in order to guarantee their constant adequacy and effectiveness or to promote the improvement of the effectiveness of the processes for the study programme management and of the associated results. Students and representatives of the labour market of reference should be involved in the review process.</p>
<p><b>Management of the review process</b></p> <p><i>(Document the management modalities of the review process, its periodicity, the period of the academic year in which it should be carried out and the information and data taken into account.)</i></p> <p>...</p> <p><b>Results of the review process</b></p> <p><i>(Make available the Review Report. A check-list for the self-assessment coherent with the QUACING Model is shown in Annex E3 of the QUACING Model.)</i></p> <p>...</p>
<p><b>Quality Requirement E4 - Publicly availability of information</b></p> <p>The engineering study programme should make publicly available full, up to date, easily acquired information, both quantitative and qualitative, on study programme aims, educational process, resources and results.</p>
<p><b>Publicity of the documentation for the QA of the ESP</b></p> <p><i>(Make available all the required documentation on the web site of the ESP or of the structure the ESP belongs to.)</i></p> <p>...</p>