The following is provided as a guide to assist HEIs and accreditation and quality assurance agencies when these agencies are applying for authorisation to award the EUR-ACE® label. It is not intended to be prescriptive. It is an indication of what ENAEE would expect to form on the basis of both the self-assessment review of an engineering degree programme by a HEI, and of the accreditation process of the agency, if the required standards are to be achieved.

1. Programme Aims

1.1 Educational needs of the labour market and other stakeholders

Documentation to be provided

Relevant industry and labour market organisations and other stakeholders consulted, and methods and schedule of consultation.

Identified educational needs of the labour market and other stakeholders.

Questions to be considered

a) Were the relevant industry and labour market organisations and other stakeholders consulted?

b) Was the methodology and schedule of consultation adequate in order to identify their educational needs?

c) Have the educational needs of these stakeholders been identified in a way which facilitates the definition of the programme aims and programme outcomes, i.e. in terms of professional profiles and/or functions/roles/activities expected of the graduates and associated required competences?

1.2 Programme Aims

Documentation to be provided

Set of Programme Aims

Questions to be considered

a) Have the programme aims been developed in terms of professional profiles of the engineering graduates and/or roles/activities students are to be prepared for, and the associated competences to be developed and obtained by the students during the learning process?

b) Are the programme aims consistent with the mission of the institution that the programme belongs to and the identified educational needs of the labour market?

1.3 Programme Outcomes

Documentation to be provided

Set of programme outcomes.

Questions to be considered

a) Have the programme outcomes been established in terms of what students are expected to know, understand and/or be able to demonstrate after completion of the learning process?

b) Are the programme outcomes consistent with the relevant national qualifications framework, if any, with the EUR-ACE® Programme Outcomes for accreditation and with the established programme aims?

2.Teaching and Learning Process

Documentation to be made available / to be required

a) Curriculum and description of its characteristics.

b) Characteristics of the modules/course units (in particular: number of ECTS credits, learning outcomes, content, typologies of teaching activities, assessment of students' learning, pre-requisites, didactic material).

c) Documentation of the suitability of the curriculum to the achievement of the programme outcomes.

Questions to be considered

a) Does the totality of the learning outcomes of the modules accumulate to constitute the programme outcomes?

b) Is the curriculum formally approved by the HEI the programme belongs to?

c) Does the curriculum embed a student-centred learning and teaching approach that enables flexible learning paths and encourages students to take an active role in co-creating the learning process?

2.2 Assesment of students' learning

Documentation to be provided

Note: The methods and criteria of assessment of the students' learning should be included in the characteristics of the course units/modules.

Questions to be considered

Do the assessment methods and criteria provide evidence of their capacity to check the effective achievement of the intended course unit/module learning outcomes by the students and ensure trust that the level of achievement by the students is assessed in a credible way?

2.3 Planning of the learning process

Documentation to be provided

Calendar and timetable of didactic activities and examinations.

Questions to be considered

Has the development of the learning process been planned in order to enable students to achieve the programme outcomes in the expected time?

2.4 Management of the learning process

Documentation to be provided

Description of how the teaching and learning process and student assessment are managed including a feedback loop in relation to the quality of the learning process and the assessment of students. This should include statistical analysis and documentation used.

Questions to be considered

a) How does the management of the learning process assure achievement of the programme aims and the programme outcomes?

b) Do the results of the quality control of the assessment tests attest their adequacy and appropriateness?

c) Is the achievement of the learning outcomes of course units/modules adequately assessed?

3. Resources

3.1 Teaching staff

Documentation to be provided

a) Curricula vitae of teaching staff.

b) Teaching support staff.

c) Recruitment policy in the selection of the teaching staff.

d) Opportunities offered to the teaching staff to improve their teaching skills and the use of new technologies.

Questions to be considered

a) Are the teaching staff appointed according to pre-defined recruitment criteria?

b) Are the teaching staff quantitatively and qualitatively adequate for the achievement of the programme outcomes by students?

c) Are the teaching support staff qualitatively adequate for the achievement of the established programme outcomes by students?

d) Does the programme offer the teaching staff the opportunity to improve their teaching skills and the use of new technologies?

3.2 Facilities and support staff

Documentation to be provided

a) Classrooms used by the programme, with the equipment available. Rooms for individual study used by the students of the programme, with the equipment available.

b) Laboratories/workshops used by the programme, with the equipment and technical staff available.

c) Libraries used by the students of the programme, with the equipment, services and library staff available.

d) Other resources and special initiatives.

Questions to be considered

a) Are the facilities at the disposal of the programme, with the associated equipment, quantitatively and qualitatively adequate for the development of the established programme aims as designed and planned, and enable the application of the established didactic methods?

b) Is there adequate technical and library staff?

3.3 Financial resources

Documentation to be provided

Needs and availability of financial resources.

Questions to be considered

Are the financial resources available to the programme adequate for the development of the learning process as designed and planned?

3.4 Student support services

Documentation to be provided

Organisation, management and activities of student support (career advice, tutoring and assistance) services, and administrative staff available.

Questions to be considered

a) Does the programme provide student support (career advice, tutoring and assistance) services relevant to the learning process and enable students' learning and progression easier?

b) Are the administrative staff quantitatively and qualitatively adequate for the effective management of the student support services?

3.5 Partnership

Documentation to be provided

a) Partnerships which enable training periods outside the university.

b) Partnerships which enable international study mobility periods.

Questions to be considered

a) Are the partnerships with public and/or private bodies for training periods outside the university adequate quantitatively and qualitatively to the achievement of the programme outcomes?

b) Are the partnerships with foreign universities or other HEI's for international mobility adequate quantitatively and qualitatively to the achievement of the programme outcomes?

4. Student admission, transfer, progression and graduation

4.1 Rules governing the students' academic career

Documentation to be provided

a) Qualifications and requirements for admission to the programme and methods of assessment of their possession by the students.

b) Regulations for the recognition of higher education qualifications, periods of study and prior learning.

c) Criteria for the management of the students' progression in their studies.

d) Certification of students' studies successfully completed.

4.2 Entrance students

Documentation to be provided

a) Results of the assessment of the possession of the admission requirements.

b) Results of the examination performance in the first year.

Questions to be considered

a) Do the results of the student examination performance in first year provide evidence of the programme attractiveness and the adequacy of the entrance requirements?

b) Is the first year curriculum designed to motivate students towards studying engineering?

4.3 Student assessment

Documentation to be provided

Result of the assessment of the students' learning in each module and each year.

Questions to be considered

Do the results of the monitoring of the students' achievement of the learning outcomes provide evidence of the effectiveness of the learning process in the course units/modules?

4.4 Student progression

Documentation to be provided

a) Results of the monitoring of student progression in the different course years.

b) Results of the monitoring of dropouts.

c) Results of the monitoring of the credits acquired by the students who pass from one course year to the next one. Results of the monitoring of the duration of studies leading to graduation.

Questions to be considered

Do the results of the monitoring of students' progression in their studies provide evidence of the effectiveness of the learning process?

5. Internal Quality Assurance

5.1 Policy and processes for the quality assurance of programmes

Documentation to be provided

a) Policy for the quality assurance of programmes of the HEI.

b) Organisational structure for the quality assurance of programmes and decision-making processes of the HEI.

Questions to be considered

a) Does the HEI conform to public policy for the quality assurance of programmes?

b) Has the HEI an effective management system and effective decision-making processes for the quality assurance of programmes?

5.2 Management system of the programme

Documentation to be provided

Quality assurance policies and procedures relevant to the programme.

Questions to be considered

Does the programme participate satisfactorily in the HEI quality assurance processes and implement relevant findings?

5.3 Programme review and development

Documentation to be provided

a) Policies and procedures for programme review and development.

b) Results of most recent programmatic review.

Questions to be considered

a) Does the programme periodically review needs and objectives, learning process, resources, results and management system, in order to guarantee their continuing relevance and effectiveness?

b) Does it promote the improvement of the effectiveness of the processes of programme management and of the associated results?

5.4 Student feedback on the learning process

Documentation to be provided

a) Students' opinion on the quality of course units/modules.

b) Students' opinion on the training periods outside the university.

c) Students' opinion on the periods of international mobility.

d) Opinion of the final year students on the learning process and support services.

Questions to be considered

Is the monitoring of student opinion adequate in relation to completeness of information gathered and response rate?

Do the results of the monitoring of student opinion on the learning process provide evidence of the adequacy and effectiveness of the learning process and of student support services?

5.5 Engineering graduates' placement

Documentation to be provided

a) Results of the monitoring of the graduates' job placement.

b) Results of the monitoring of student progression to Master programmes (only for Bachelor programmes).

c) Results of the monitoring of student progression to Doctoral studies (only for Master programmes).

d) Results of the monitoring of employed graduates' opinions on the education received.

e) Results of the monitoring of employers' opinion on the graduates' education

Questions to be considered

Do the results of the monitoring of the engineering graduates' job placement and of the employed graduates' and employers' opinions on the graduates' education provide evidence of the qualification's value, of the appropriateness of the programme aims and the programme outcomes to the educational needs of the labour market?

5.6 Public availability of information

Documentation to be provided

Documentation in relation to the quality assurance of the programme as publicly provided.

Questions to be considered

Does the programme make publicly available full, up to date, easily accessed information, both quantitative and qualitative, on its objectives, learning process, resources, results and management system?