



## Tempus Project n. 543727-TEMPUS-1-2013-1-IT-TEMPUS-SMGR ON-LINE QUALITY ASSURANCE OF STUDY PROGRAMMES (EQUASP)

# WP.1 - Standards and Guidelines for Quality Assurance of Study Programmes

**Deliverable 1.1 - Standards and Guidelines for Quality Assurance of Study Programmes** 

# **WP.2 - Online documentation for Quality Assurance of Study Programmes**

**Deliverable 2.1 - Documentation for Quality Assurance of Study Programmes** 

Deliverable 2.2 - Methodologies and procedures of definition, gathering, elaboration and presentation of information and data for Quality Assurance of Study programmes

## EQUASP Standards and Guidelines for internal Quality Assurance of Study Programmes (EQUASP Model)

**Final** 

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#### **Summary**

In the first three sections, the document establishes what is meant for quality and quality assurance of study programmes and presents the Tuning approach to the design of study programmes and the standards and guidelines for internal quality assurance in the European Higher Education Area.

The fourth section describes the EQUASP approach to the quality assurance of study programmes, through the definition of the EQUASP standards and associated quality requirements, and introduces the expected activities for the accomplishment of the quality requirements and the documentation required in order to provide evidence of the quality of the educational service offered by study programmes.

The EQUASP standards and guidelines, i.e. quality requirements with the associated expected activities for their accomplishment and required documentation, for quality assurance of study programmes are set out in the fifth and last section, "EQUASP Standards and Guidelines for internal Quality Assurance of Study Programmes (EQUASP Model)".

The document represents the outcome of the WP. 1 - Standards and Guidelines for Quality Assurance of Study Programmes, Deliverable 1.1 - Standards and Guidelines for Quality Assurance of Study Programmes, and of the WP.2 - Online documentation for Quality Assurance of Study Programmes, Deliverable 2.1 - Documentation for Quality Assurance of Study Programmes and Deliverable 2.2 - Methodologies and procedures of documentation, of the EQUASP Tempus project.

## 1. Quality and Quality Assurance of Study Programmes

Coherently with the ISO 9000 definition of quality, in the EQUASP project with 'study programme quality' it is meant "the grade (level) of fulfilment of the objectives established coherently with the needs and expectations of all those who are interested in the educational service provided". In other words, "the level of accomplishment of the quality requirements established coherently with the needs and expectations of all the stakeholders".

Quality assurance (QA) is the instrument to make study programme (SP) quality transparent and trustworthy for all the stakeholders, students and employers first of all.

Always coherently with the ISO 9000 definition of QA, with 'study programme quality assurance' it is meant "the whole of the activities (processes) for the management of the educational service aimed at achieving the established educational objectives and then at 'ensuring trust' in meeting the quality requirements to all the stakeholders".

## 2. Tuning Approach to the Design of Study Programmes

The Bologna process, with the introduction of a three-cycle system, has implied a drastic change in the design of SPs. In a cycle system, each cycle should be seen as an entity in itself. In particular, the first two cycles should not only give access to the following cycle, but also to the labour market.

The 'old' SPs, not based on the concept of cycles, were designed on the basis of tradition and the resources already available. They can be considered as 'input-based' or 'teacher/staff oriented/centred'. In such SPs, the emphasis is placed on the individual interests of academic staff or on the existing organisation of studies.

Although the importance of making maximum use of the available expertise of the staff in the design of SPs is out of doubt, this aspect should not dominate the design of 'new' SPs, based on the concept of cycles.

At present Higher Education Institutions (HEIs) are undergoing a transformation process. The traditional approach is slowly giving way to an 'output-based', 'student-oriented/centred' approach, which takes the student as the centre of the teaching and learning process.

The aim of student-centred SPs is to make students as competent as is feasible in a given timeframe for their future role in society. In these SPs, the focus is no more on what a student has been taught, but on what a student has learned and is able to do. Consequently, SPs leading to a bachelor or master degree are no longer to be described and planned solely according to their content, but mainly according to the 'competences' expected in the graduates and the 'learning outcomes' to be achieved by students during the educational process.

<sup>&</sup>lt;sup>1</sup> According to the Tuning approach, 'competences' represent a dynamic combination of knowledge, understanding, skills (that is 'learned capacities', according to the Tuning glossary) and abilities ('acquired or natural capacities'). This definition is in line with the international ISO 9000 norm that defines competence as "demonstrated ability to apply knowledge and skills", and with the European Qualification Framework that defines competence as "proven ability to use knowledge, skills and personal, social and/or methodological abilities in work or study situations and in professional and personal development".

They should correspond to the competences necessary to carry out the role expected for the graduates in the labour market. Fostering competences is the object of all educational programmes.

<sup>&</sup>lt;sup>2</sup> 'Learning outcomes' are statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning.

According to Tuning, learning outcomes have to be expressed in terms of (the level of) competence (knowledge, understanding, skills and abilities) to be obtained by the learner. Consequently, the programme learning outcomes should align with the programme competences, not necessarily on a one to one basis, but overall. Learning outcomes specify the requirements for award of credits.

The methodology for design educational programmes consistent with the Bologna process principles has been developed within the framework of the *Tuning Educational Structures in Europe* [1]. Tuning is a university driven initiative originally set up to offer a concrete approach to implement the European Bologna process at the level of HEIs and subject areas, and has become the leading approach within the common European education space.

The quintessence of the Tuning approach [2] resides in the so called 'degree profile'. The degree profile must clearly define the aims and purposes of the SP, describe in terms of competences and learning outcomes that graduates will know, understand and be able to do by the time they have successfully completed the SP, spell out what can be expected of the graduates in terms of the kinds of tasks they are equipped to undertake, their level of expertise and the responsibilities they can assume.

In particular, the Tuning approach to SPs design in the framework of an internal QA system comprises the following steps:

- confirm the existing social need for the SP and define the SP profile,
- describe the SP objectives and identify the key competences (subject-specific and generic) it should develop,
- identify and formulate measurable learning outcomes of the SP, expressed in term of competences, the achievement of which should demonstrate that the graduate has developed the identified competences,
- design and describe the SP structure and contents (the set of modules or course units for the
  award of the degree and for each module the credits and learning outcomes to be achieved in
  order to obtain the specified credits),
- check the correspondence among the structure and contents of the SP and the programme learning outcomes,
- select approaches to teaching and learning as well as methods of assessment in line with the competences to be developed.

## 3. Standards and Guidelines for internal Quality Assurance in the European Higher Education Area

Today the definition of suitable academic strategies in order to promote SP quality can rely on the standards and guidelines for internal quality assurance (iQA) of higher education (HE) established in the document *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ESG) [3]. This document was prepared by the European Association for Quality Assurance in Higher Education (ENQA) in co-operation with the European Students' Union (ESU), the European Association of Institutions in Higher Education (EURASHE) and the European University Association (EUA), adopted by the Ministers of Higher Education of 45 countries in the meeting in Bergen (Norway) on 19-20 May 2005 and revised in the meeting in Yerevan (Armenia) on 14-15 May 2015. It has found a generalised acceptance in the European context.

In the ESG, the term 'quality assurance' is used to describe all activities within the continuous improvement cycle (i.e. assurance and enhancement activities).

The 'standards' set out agreed and accepted practice for QA in HE in the European Higher Education Area (EHEA).

The 'guidelines' explain why the standard is important and describe how standards might be implemented and set out good practices in the relevant area for consideration by the actors involved in QA. Although the guidelines are not part of the standards themselves, the standards should be considered in conjunction with them.

It is important to note that the purpose of these standards and guidelines is to provide a source of assistance and guidance to HEIs in developing their own QA system, as well as to contribute to a common frame of reference, which can be used by institutions. It is not the intention that these standards and guidelines should dictate practice or be interpreted as prescriptive or unchangeable.

The document has also introduced the concepts of internal and external QA. With reference to SPs, 'internal quality assurance' regards the activities of QA in the responsibility of the SP or of the structure the SP belongs to. 'External quality assurance' regards the activities of the QA agencies and can include assessment and/or accreditation of SPs.

The standards and guidelines for iQA within HEIs are set out in Part 1 of the ESG<sup>3</sup>. They are shown in Annex 1.

## 4. EQUASP Approach to internal Quality Assurance of Study Programmes

Consistently with the Tuning approach to SP design and the revised ESG, the EQUASP approach to iQA of SPs assumes that a SP may be said 'of quality' when it complies with the national standards and requirements and:

- it establishes educational objectives consistent with the mission of the institution the SP belongs to and the educational needs of the labour market of reference, and learning outcomes consistent with the educational objectives<sup>4</sup>;
- it designs and implements an educational process adequate to achieve the learning outcomes, which embeds a student-centred learning approach, ensures a correct assessment of students' learning, keeps under control its development and establishes appropriate regulations for students' admission, recognition, progression and attestation;
- teaching staff, facilities, student support services, partnerships with businesses, research institutions and other HEIs, and financial resources are adequate to achieve the learning outcomes and are kept under control;
- it monitors the results of the educational process;
- it adopts an adequate and effective management system able to assure the SP quality and its continual improvement, and guarantees public access to the information on the SP.

These principles must inspire design, development and control of a SP.

Correspondingly, the EQUASP approach defines five 'EQUASP standards' for the iQA of SPs:

Standard A - Needs and Objectives

Standard B - Educational Process

Standard C - Resources

Standard D - Monitoring and Results

Standard E - Management System

They are set out in section 5 - Table 2.

The definition of an iQA system of a SP requires the identification of all the activities (processes) for a 'management for quality' of SPs.

<sup>&</sup>lt;sup>3</sup> The standards are in three parts covering internal QA (Part 1), external QA (Part 2) and QA agencies (Part 3). The standards for QA agencies regard the characteristics that should be fulfilled by QA agencies.

<sup>&</sup>lt;sup>4</sup> For the definitions of 'educational objectives', 'learning outcomes' and other specific terms used in the document, see the EQUASP Glossary of Terms.

The processes associated to each EQUASP standard to be considered fundamental to assure the quality of SPs have been identified consistently with the Tuning approach to SP design [2] and the ESG [3]. They are set out in Table 1.

Table 1 - Fundamental processes of the QA of SPs

Standard	Fundamental processes
A Needs and Objectives	A1 - Identification of the educational needs of the labour market and other stakeholders
	A2 - Definition of the educational objectives
	A3 - Definition of the learning outcomes
В	B1 - Design and planning of the educational process
Educational	B2 - Admission, recognition, progression and attestation
Process	B3 - Realization of the educational process
C Resources	C1 - Identification and assignment of the teaching staff
	C2 - Identification and allocation of facilities (in particular: lecture and study rooms, laboratories, libraries) and support staff
	C3 - Organisation and management of student support (orienteering, tutoring and assistance) services
	C4 - Establishment of partnerships with national and international businesses,
	research institutions and other Higher Education Institutions for carrying
	out students' external education and mobility
	C5 - Identification of the needs and allocation of financial resources
D	D1 - Monitoring of the incoming students
	D2 - Monitoring of the students' learning
	D3 - Monitoring of the students' progression in their studies
Monitoring and	D4 - Monitoring of the students' opinion on the educational process
Results	D5 - Monitoring of the graduates' placement
	D6 - Monitoring of the employed graduates' and employers' opinion on the graduates' education
	E1 - Definition of the policy and organization for quality assurance of study
Е	programmes
Management	E2 - Definition of the management system of the study programme
System	E3 - Review
	E4 - Provision of public access to information on the study programme

Then for each identified process, the 'quality requirements' (QRs), i.e. the needs or expectations for quality, have been established according to the ESG [1], together with the expected activities for their accomplishment and the information and data required in order to provide evidence of the quality of the educational service offered, and therefore to assure its quality<sup>5</sup>.

They are set out in section 5 - Table 2.

<sup>5</sup> Information and data to be documented will have to fulfil specific characteristics directly connected with the specific objectives of the EQUASP project.

In order to increase the transparency of SPs and promote the modernisation of HEIs, the documentation should be easily accessible on the net, have a simple structure and be drawn up in a short and essential form, which shall optimize all aspects related to the interaction with all the stakeholders.

Furthermore, in order to promote the comparability of SPs and enhance mutual trust in their quality, the documentation will have to be prepared according to drawing-up modes (extension, language, reading format) homogeneous at national (and international) level.

## 5. EQUASP Standards and Guidelines for the Internal Quality Assurance of Study Programmes (EQUASP Model)

The EQUASP Standards and Guidelines (i.e. QRs, with the associated expected activities for their accomplishment and required documentation) for the internal Quality Assurance of Study Programmes ('EQUASP S&G for iQA of SPs' or 'EQUASP Model') are set out in the following Table 2.

Annex 1, Annex 2, Annex 3, Annex 4 and Annex 5 (see document *EQUASP Standards and Guidelines for internal Quality Assurance of Study Programmes (EQUASP Model) - Annexes*) document the correspondence and consistency of the EQUASP Model respectively with:

- ESG Guidelines for iQA of HE [3],
- EAFSG Standards and Guidelines for Programme Management (§ 2.4 of the EAFSG) [4],
- EAFSG Required Documentation (Appendix 1 of the EAFSG) [4],
- AEER Accreditation Criteria of First Cycle SPs [5],
- AEER Accreditation Criteria of Second Cycle SPs [5].

As for the required documentation for the QA of the SPs, the EQUASP Model specifies also the information and data that should be documented in a Documentation File<sup>6</sup> by making them available directly on the file or in attachment to the documentation file or by indicating the web site where they can be found.

Furthermore, when considered useful the EQUASP Model suggests the use of some tables for the documentation of the required information and data (from Annex C4.1 to Annex E3).

The EQUASP Model assumes that the SP is the only structure in charge of the management of the processes associated to the QRs. In some cases, the structures in charge could be others, in particular the structure the SP belongs to. This does not imply any change as for both the QRs and the expected activities.

Table 2 - Standards and Guidelines for internal Quality Assurance of Study Programmes

## **General Entry**

#### **Study Programme**

*Indicate the full name (i.e. no acronyms) of the SP.* 

#### **Direction of study**

Provide the full name (i.e. no acronyms) of the direction of study according to the FESF.

#### Cycle /Level

Indicate the cycle/level of the qualification according to the National Qualifications Framework (where available), the QF for EHEA and the EQF for LLL.

#### **Type of Degree & Duration**

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 SP in ECTS-credits, and/or - if applicable - national/institutional credits and/or years of study.

#### Institution(s)

Give the official name of the awarding institution(s) and the country where it is based. In case of

<sup>&</sup>lt;sup>6</sup> See the document "EQUASP Standards and Guidelines for internal Quality Assurance of Study Programmes (EQUASP Model) - Documentation File".

joint SPs, indicate also which is the coordinating institution.

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.

## Accreditation Organisation(s) and Period of validity

Identify the accreditation organisation(s) that provides the accreditation of the SP or the degree awarding institution and the country in which the accreditation organisation operates. Identify the year(s) for which the SP is validated/approved.

## **Purpose**

Provide, in a few sentences, a summary - a 'synthetic view'- of the overall purpose of the programme.

## Discipline(s) / Subject area(s)

Indicate the main discipline(s) / subject area(s) of the SP.

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**

This section aims to provide the reader with information on whether the degree is aimed towards a more general academic education or a specialism, or a combination of the two. A general SP 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 SP. If the SP includes a specialism, please provide a brief statement of the specialism(s).

#### **Orientation**

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

## **Teaching & Learning Approaches**

This section aims to provide the reader with information about the educational style. Examples of teaching approaches include: student focused, teacher centred, teacher guided, self-directed study. Examples of learning approaches include: problem based learning, task based learning, research based learning, learning through laboratory practice, reflective learning, work placements, group work, individual study and autonomous learning.

*Indicate in few lines the main teaching and learning strategies and methods.* 

#### **Assessment Methods**

This section aims to provide information about the main assessment methods in the programme. Examples of assessment methods include: oral and written examinations, essays, presentations, reports, project work, case studies, portfolio.

Indicate in few lines the main assessment methods.

#### **Distinctive Features**

Indicate, in a few sentences, any additional features that distinguish this SP from other similar SPs. 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 - Needs and Objectives**

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

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

The study programme should identify the educational needs of the labour market of reference and other stakeholders. The educational needs should be identified in terms of professional profiles and/or functions/roles/activities expected for the graduates and associated required competences.

#### **Expected Activities**

The SP should identify the educational needs of all its stakeholders and in particular those of the labour market of reference.

The educational needs should be identified in a way appropriate for the definition of the educational objectives of the SP. To this end, the educational needs should be identified in terms of functions/roles/activities expected for the graduates in the first years of their placement in the labour market and required competences.

In order to identify the educational needs of the labour market, first of all the SP should identify the organisations representative of the production, services and professions world and/or employers to be consulted.

The educational needs of the labour market of reference may be identified in many ways. They may be:

- mentioned in documents, studies, labour market analysis of the external stakeholders (Ministries, organisations representative of the production, services and professions world, etc.):
- identified through direct contacts with organisations representative of the production, services and professions world and/or employers (e.g. through meetings of working groups composed by representatives from University and from the labour market of reference, surveys by questionnaires, interviews, focus groups, etc.);
- identified through the relationships with organisations for carrying out training periods outside the University (in companies, etc.) by students;
- identified through the results of the graduates' placement in the labour market.

The SP should indicate how the educational needs of the labour market of reference are identified, i.e. the consultations method/s and schedules (e.g.: annual periodicity, at established terms, etc.).

All these information should be properly documented.

#### **Required Documentation**

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

List the organisations representative of the production, services and professions world and/or the employers consulted in order to identify the educational needs of the labour market.

List the consultations method/s and schedules.

Provide only information properly documented.

#### Identified educational needs of the labour market

List the identified educational needs of the labour market of reference and make available the document where they are registered.

#### Identified educational needs of other stakeholders

List the other stakeholders consulted and their identified educational need, and make available the document where they are registered.

## **Quality Requirement A2 - Educational objectives**

The study programme should define educational objectives in terms of professional profiles of the graduates and/or functions/roles/activities students are to be prepared for and associated key competences to be developed and obtained by the students during the learning process, consistent with the mission of the institution the study programme belongs to and the identified educational needs.

#### **Expected Activities**

The SP should establish educational objectives in terms of professional profiles of the graduates and/or functions/roles/activities students are to be prepared for and associated key competences<sup>7</sup> to be developed and obtained by the students during the learning process. The established educational objectives should be consistent with the mission of the institution the SP belongs to and the identified educational needs.

Furthermore, the SP should indicate the main areas in which graduates can be employed, giving indications about the level of responsibility they will be qualified to take.

The first cycle study programmes should also indicate the second cycle SPs where graduates can continue their studies.

All these information should be properly documented.

#### **Required Documentation**

#### **Educational objectives**

List the established educational objectives. For each established professional profile of the graduates and/or function/role/activity students are to be prepared for, list the associated key competences to be developed and obtained by the students during the learning process, subdivided between subject specific and generic ones.

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 SPs in which the first cycle graduates can continue their studies.

Provide only information properly documented.

## **Quality Requirement A3 - Learning outcomes**

The study programme should define 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, and the established educational objectives.

#### **Expected Activities**

The SP should establish learning outcomes<sup>8</sup> in terms of what a student is expected to know, understand and/or be able to demonstrate after completion of the learning process.

The learning outcomes should be adequate to the reference cycle (I or II) of the SP<sup>9</sup> and consistent with the national qualification framework, if any, and with the established educational objectives. Furthermore, they should be S.M.A.R.T.: Specific (they should adequately reflect the context, level, scope and content of the programme), Measurable (they should be properly detailed in order to favour the understanding of the depth and extent of expected learning and objectively assessable in terms of what the student has actually achieved at the end of the programme), Achievable

<sup>7</sup> A guide to formulating the SP competences is provided by Tuning [6]. A synthesis of the Tuning approach is reported in Annex A2.

<sup>&</sup>lt;sup>8</sup> A guide to formulating the SP learning outcomes is provided by Tuning [6]. A synthesis of the Tuning approach is reported in Annex A3.1.

<sup>&</sup>lt;sup>9</sup> In particular, the SP learning outcomes should be consistent with the Dublin descriptors [7]. The Dublin descriptors for 1<sup>st</sup> and 2<sup>nd</sup> cycle SPs are shown in Annex A3.2.

(consistent with the institutional context and the available resources), Relevant (only the 'key' learning outcomes should be established at programme level), Time-related (plannable and achievable within the specified workload).

The learning outcomes should be properly documented.

The SP should compare the established learning outcomes with those of other SPs of the same typology offered in the national and international contexts, in order to check the similarities and point out its peculiarities.

#### **Required Documentation**

#### **Learning outcomes**

List the learning outcomes of the SP.

Provide only information properly documented.

#### Comparison with learning outcomes of other SPs of the same typology

Describe the exits of the comparison with the learning outcomes of other SPs of the same typology or make available the document where they are registered.

## **Standard B - Educational process**

The study programme should assure students educational activities consistent with the national standards, if any, and able to achieve the established 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 study programme should also define appropriate rules covering student admission, recognition, progression and attestation and keep under control the development of the educational process.

## Quality Requirement B1 - Design and planning of the educational process

The 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 learning outcomes. The curriculum should embed a student-centred learning and teaching approach.

The study programme should also define assessment methods and criteria able to ensure a correct assessment of the students' learning.

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

#### **Expected Activities**

The SP should establish a curriculum<sup>10</sup> and characteristics of the course units consistent with the national standards, if any, and able to allow all students to achieve the established learning outcomes within the official duration of the SP, according to a gradual process and through coherent and coordinated educational activities.

The curriculum should indicate at least the list of the course units, their sequence (year and semester of delivery), the number of ECTS credits<sup>11</sup> allocated to each unit and the unit lecturer.

The curriculum should embed a student-centred learning and teaching approach. In particular, it should enable flexible learning paths and encourage students to take an active role in co-creating the learning process.

The curriculum should be approved by another body besides the one composed by the only

<sup>&</sup>lt;sup>10</sup> A synthesis of the Tuning comments to the formulation of the SP [2] is reported in Annex B2.

<sup>&</sup>lt;sup>11</sup> If the SP uses a national system of credits, indicate the number of national credits and the equivalence with the ECTS credits.

teaching staff of the SP and should be properly documented.

For each course unit the SP should define at least:

- name:
- number of ECTS credits<sup>11</sup>;
- course year and teaching period of delivery;
- lecturer/s:
- learning outcomes specific of the course unit and consistent with the established learning outcomes of the SP;
- contents and schedule;
- teaching and learning methods (face to face education, paper-based distance education, ICT-based distance education), also in terms of hours/credits for each form, and typologies of educational activities or teaching techniques (e.g.: lectures, practical classes, project classes, laboratory sessions, seminars, etc.), also in terms of number of hours/credits for each technique;
- assessment methods (e.g.: written examinations, oral examinations, etc.) and assessment criteria (descriptions of what the learner is expected to do and to what level, in order to demonstrate that a learning outcome has been achieved and to what extent); criteria for measuring students' learning or assessment metrics (e.g.: attribution of a final grade, fitness declaration, etc.) and criteria of attribution of the final grade, if any;
- preparatory course units, if any;
- educational material of reference (e.g.: textbooks, lecture texts, etc.).

The assessment methods and criteria should provide clear evidence of their capacity to check the effective achievement of the intended learning outcomes by the students and ensure trust that the level of achievement by the students is correctly assessed.

The definition of the characteristics of the course units should be coordinated by the SP, particularly in order to avoid gaps or superimpositions in the definition of the specific learning outcomes and contents and to assure the suitability of the assessment methods to a correct assessment of the students' learning. The SP should establish how to manage the coordination activity.

As for the graduation exam, the SP should define at least:

- workload, in terms of ECTS credits 11/hours;
- requirements to be fulfilled by the final work or thesis;
- carrying out of the graduation exam;
- criteria for the attribution of the graduation grade.

Also the characteristics of the course units and of the graduation exam should be properly documented.

The SP should document the suitability of the curriculum to the achievement of the expected learning outcomes, by at least pointing out the course units (thesis work included) which contribute to the accomplishment of each learning outcome.

The SP should define:

- calendar and timetable of the course units,
- calendar of the exams, graduation exam included, and composition of the exam commissions.

The planning of the educational activities should provide students with adequate time for individual study and facilitate their studies progression.

All these information should be approved by the SP.

#### **Required Documentation**

#### Curriculum

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 SP 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 exam

Describes the characteristics of the graduation exam.

Provide only information properly documented.

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

Document the suitability of the curriculum to the achievement of the expected learning outcomes.

#### Calendar and timetable of course units and exams

Make available the:

- calendar and timetable of the course units,
- calendar of the exams, graduation exam included, and composition of the exam commissions. Provide only information approved by the SP.

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

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

#### **Expected Activities**

The SP should establish the qualifications required for admission to the SP and the admission requirements, in terms of knowledge and/or understanding and/or capacities required for a profitable participation of the students in the established educational activities, in particular of the first course year.

The SP should organize possible activities in order to promote the possession of the admission requirements by the students and establish the methods of assessment of their possession by the students

The SP should also specify the required level of possession of the admission requirements and the criteria for the selection of the students to be admitted when the number of applications is larger than the number of students who can be enrolled.

The SP should establish rules for the recognition of higher education qualifications, periods of study and prior learning, including the recognition of non-formal and informal learning.

The SP should also establish management criteria of the students' career able to favour a regular students' progression in their studies. These criteria should regard at least:

- frequency of the educational activities;
- number of ECTS credits<sup>11</sup> necessary for the enrolment in the successive course year;
- number of ECTS credits<sup>11</sup> to be accumulated before the holding of training periods.

Furthermore, the SP should establish appropriate rules to regulate the studies progression of at least:

- part time students;
- working students,
- handicapped students;
- students who cannot attend the educational activities for a long period for causes independent from their will (e.g.: in case of illness, etc.).

Finally, after the completion of the studies, the SP should provide the graduates with a document ('Diploma Supplement') explaining the qualification gained, including the achieved learning outcomes and the context, level, content and status of the pursued and successfully completed studies.

All these information should be properly documented.

#### **Required Documentation**

#### Admission

Provide the required qualifications and the established requirements and criteria for the admission to the SP, 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.

#### **Ouality Requirement B3 - Realization of the educational process**

The study programme should realise 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 learning outcomes and the correctness of the evaluation of the students' learning.

#### **Expected Activities**

The SP should realise the educational process coherently with the designed and planned development. To this end, the SP should keep under control its development, also in order to resolve any urgent and immediate problem.

The correspondence of the development of the educational process with the designed and planned development can be controlled in different ways, 'direct' (e.g.: direct control of the observance of the lecture timetable by the lecturers, etc.) and/or 'indirect' (e.g.: through the control of the lecture registers, through the survey of the students' opinions on the course units, etc.).

The SP should establish how to keep under control the development of the educational process. Both the adopted methods and the results of the control should be properly documented.

The SP should keep under control also the assessment tests and the final work/thesis, in order to

check their adequacy to the assessment of the achievement of the learning outcomes by students and the correctness of the evaluation of the students' learning.

The adequacy of the assessment tests could be controlled in different ways, 'direct' (e.g.: the examte control of the examination tests or questions, the direct control of the oral tests, the ex-post control of the written tests, etc.) and/or 'indirect' (e.g.: through the monitoring of the results of the assessment tests, through the survey of the average final grade and of the grade variation for each course unit which requires the attribution of a final grade, etc.). The adequacy of the final work/thesis can be easily kept under control by monitoring the topics and content of the final works/theses.

The SP should establish how to keep under control the adequacy of the assessment tests and of the final work/thesis. Both the adopted methods and the results of the control should be properly documented.

#### **Required Documentation**

#### Control of the development of the educational process

Describe how the SP 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 SP 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 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 study programme should have at disposal teaching staff, facilities, student support services, partnerships and financial resources adequate for 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 assigned according to pre-definite criteria of choice or selection and the programme should offer the teaching staff the opportunity to improve their teaching skills and the use of new technologies.

#### **Expected Activities**

The SP should identify and make available teaching staff (in charge of the course units) and teaching support staff (in charge of practical lessons, laboratory activities, etc.) quantitatively (e.g. with reference to the number of students) and qualitatively (e.g. with reference to their qualification, competence and scientific interests) adequate for the achievement of the learning outcomes by students.

The teaching staff and teaching support staff should be assigned according to pre-definite criteria of choice or selection. The SP should establish the choice or selection criteria. This information should be properly documented.

Furthermore, the teaching staff should have appropriate didactic skills. In this regard, the SP should offer the teaching staff the opportunity to improve their teaching skills, also in using of new technologies, and to achieve acceptable standards.

The SP should gather and update all the information necessary to provide evidence of the adequacy of the available teaching staff [in particular: concerning academicians, academic

qualification and CV, including information on research activities carried out and papers published in the last x (e.g. 5) years; concerning professionals, professional works and/or activities carried out in the last x (e.g. 5) years] and teaching support staff [in particular: qualification, total number of hours of didactic workload, duties (e.g.: practical training, lab assistance, etc.)].

#### **Required Documentation**

#### **Teaching staff**

List the SP teaching staff and provide at least the following information for each lecturer:

- academic or professional qualification;
- list of the course units he/she is in charge of, subdivided into course units of the SP under consideration and course units of other SPs;
- for each course unit, if he/she is the holder or the title on the basis of which it is covered (e.g.: additional duty, contract, etc.).

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

Document the criteria of choice or selection of the teaching staff. Provide only information properly documented.

Provide the information about the opportunities offered to the teaching staff for improving their teaching skills 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 criteria of choice or selection of the teaching support staff.

Provide only information properly documented.

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

The 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.

#### **Expected Activities**

The SP should identify and make available facilities (in particular: lecture and study rooms, laboratories, libraries) quantitatively (e.g. with reference to the number of enrolled students) and qualitatively (e.g. with reference to logistics, habitableness, availability of audiovisual equipment, availability of web connection as for the lecture and study rooms; laboratory activities established in the curriculum as for the laboratories; needs of documentation by the students as for the libraries) adequate to the development of the educational activities according to what designed and planned and to actuate the established educational methods. Also the available technical-administrative staff in charge of the management of the facilities should be quantitatively and qualitatively adequate.

The SP should gather and update all the information necessary to provide evidence of the adequacy of the available facilities [in particular: concerning lecture rooms, number of seats, availability of audio-visual equipment, availability of web connection, availability of surveillance and assistance staff; concerning study rooms, number of seats, availability of web connections, opening time and access rules, availability of surveillance and assistance staff; concerning

laboratories and PC rooms, availability of equipment or personal computers and software of interest for the educational activities of the SP, number of workplaces and number of students for workplace, availability of technical staff; concerning libraries, available bibliographical material of interest for the educational activities of the SP, 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, availability of librarian staff] and of the technical-administrative staff (in particular: qualification and duties).

Of course, the SP may have at disposal other resources (ICT services, transports, canteens, student accommodations, sports facilities, etc.) and the SP or the structure it belongs to may undertake special initiatives (cultural initiatives, recreational activities, etc.) useful to the effectiveness of the educational process.

#### **Required Documentation**

#### Lecture rooms

List the lecture rooms utilised by the SP 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 SP 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 SP available;
- number of work places and number of students for work place;
- access rules;
- technical staff, their qualification and duties.

#### Libraries

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

- availability of updated bibliographical material of interest for the educational activities of the SP:
- 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 SP and special initiatives undertaken by the SP or the structure it belongs to.

## **Quality Requirement C3 - Student support services**

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

#### **Expected Activities**

The students of the SP should have at their disposal the following services at least:

- student administrative office, whose main responsibility should be the management of the students' career, issue of the Diploma Supplement included;
- orienteering service for incoming students, whose main responsibilities should be to favour a correct knowledge of the educational objectives and of the characteristics of the SP and to orient students in order to favour an aware choice of the SP:
- tutoring service, whose main responsibilities should be to favour an effective insertion in the educational process of the SP and an effective students' progression in their studies;
- service for carrying out training periods outside the University, whose main responsibilities should be the organisation and the management of training periods at national and/or international public and/or private bodies;
- mobility service, whose main responsibilities should be the organisation and the management of the mobility of students in exit at and in entrance from other national and/or international HEIs;
- job placement service, whose main responsibility should be to favour the placement of the graduates in the labour market.

The SP should gather, update and make available all the information useful to provide evidence of the adequacy of the available services and of the administrative staff.

#### **Required Documentation**

#### 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.

#### Orienteering 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 the University

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.

#### **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 C4 - Partnerships**

The 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 mobility.

#### **Expected Activities**

The SP should establish partnerships with national and/or international public and/or private bodies for carrying out training periods outside the University (training periods, carrying out the final work, etc.) adequate to the achievement of the intended learning outcomes.

The SP should establish partnerships with other national and/or international HEIs for the students' mobility (carrying out of periods of education abroad, awarding of joint degrees, etc.) adequate to the achievement of the intended learning outcomes.

#### **Required Documentation**

#### Partnerships for carrying out training periods outside the 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 C4.1 can be used.

#### Partnerships for carrying out mobility periods

Make available the list of the active partnerships for carrying out students' 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 C4.2 can be used.

#### **Ouality Requirement C5 - Financial resources**

The study programme should have at disposal financial resources adequate for the development of

the educational process according to the designed and planned activities.

#### **Expected Activities**

The SP should define the needs of financial resources through the identification of the expense needs (e.g.: remuneration of contract teachers; remuneration of support teachers; updating of the laboratory equipment; maintenance of the laboratories; educational material to be distributed to students; etc.) and the amount of the relative expenses.

Then the SP should make available the financial resources necessary to the realization of the educational process.

All this information should be properly documented.

#### **Required Documentation**

#### 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:

- financer 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.

## **Standard D - Monitoring and Results**

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

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

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

#### **Expected Activities**

In order to check its attractiveness, the SP should monitor the incoming students through the gathering of the results relative at least to:

- the assessment of the possession of the admission requirements by the incoming students enrolled in the first course year (only by first cycle and integrated second cycle SPs);
- the number of the incoming students enrolled in the first course year, their geographical and secondary school of provenance.

As for the results of the assessment of the possession of the admission requirements, the required data are the levels of possession of the admission requirements.

As for the school provenance, the required data regard the typology of the school of provenance and the grade of the school-leaving examination.

#### **Required Documentation**

**Assessment of the possession of the admission requirements** (only first cycle and integrated second cycle SPs)

Make available the data relative at least at the last three cohorts for which full surveys are

available required by Table D1.1\_B of Annex D1.

## **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 D1.2\_B for the Bachelors;
- Table D1.2 M for the Masters;

of Annex D1.

## Quality Requirement D2 - Students' learning

The study programme should monitor the students' learning in order to check the effectiveness of the course units.

#### **Expected Activities**

In order to check the effectiveness of the course units, for each course unit the SP should monitor the students' learning through the gathering of the following data at least:

- the number of students who have to take the examination in the academic year under consideration;
- the number of students who have passed the examination in the academic year under consideration:
- the average value of the grades attributed to all the students who have passed the examination;
- the grade variation.

The control of the results of the assessment tests makes also possible the indirect control of the adequacy of the tests to check the level of achievement of the learning outcomes specific of the single course unit and the correctness of the assessment of the students' learning by the lecturers. At this regard direct and more adequate monitoring are the ex-ante control of the examination tests, the control of the development of the assessment tests, the ex-post control of the written tests, etc..

## **Required Documentation**

#### Students' learning

Make available the data relative at least at the last three cohorts for which full surveys are available required by Table D2.1 of Annex D2.

#### **Further monitoring**

Describe the other methods of control of the assessment tests eventually carried out by the SP and make available their results relative at least at the last three cohorts for which full surveys are available.

## Quality Requirement D3 - Students' progression in their studies

The study programme should monitor the students' progression in their studies (in particular: dropouts, number of credits acquired at the end of each course year, time to graduation) in order to check the effectiveness of the educational process.

## **Expected Activities**

In order to check the effectiveness of the educational process, the SP should monitor the students' progression in their studies through the gathering of the following data at least:

- the number of students who pass from one course year to the successive one and the number of dropouts;
- the median and the average value, with the associated variation, of the number of ECTS credits with which students pass from one course year to the successive one;

• the number of graduates within the official length of the SP.

#### **Required Documentation**

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

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

- Table D3.1\_B for the Bachelors;
- Table D3.1 M for the Masters:

of Annex D3.

#### **Dropouts**

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

- Table D3.2\_B for the Bachelors;
- Table D3.2 M for the Masters;

of Annex D3.

#### Credits acquired by the students

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

- Table D3.3\_B for the Bachelors;
- Table D3.3\_M for the Masters;

of Annex D3.

#### **Graduation time**

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

- Table D3.4\_B for the Bachelors;
- Table D3.4\_M for the Masters;

of Annex D3.

## Quality Requirement D4 - Students' opinion on the educational process

The study programme should monitor the students' opinion on the educational process in order to check the perceived adequacy and effectiveness.

#### **Expected Activities**

In order to check the perceived adequacy and effectiveness of the educational process, the SP should monitor at least the students' opinion on:

- the course units;
- the training periods outside the University;
- the periods of mobility;

and the final year students' opinion on the educational process and on the student support services. The monitoring of the students' opinion should at least consider the list of questions reported in the document *EQUASP Questionnaires for monitoring of perceived quality*.

Other monitoring can regard the survey of the incoming students' opinion on the orienteering service for incoming students.

For each monitoring the SP should define the monitoring instrument (e.g.: on-line questionnaires, paper questionnaires, interviews, etc.) and schedule (e.g.: before the end of the lessons, during the examination period, etc.) and gather the monitoring results. In particular, the information and data gathered through the monitoring of the students' opinion on the course units should be aggregated

with reference to both the single course unit and all the course units of the curriculum in order to monitor the perceived effectiveness of each single course unit and of the curriculum as a whole.

## **Required Documentation**

#### Students' opinion on the course units

Describe the monitoring instrument and schedule of the students' opinion 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.

#### Students' opinion on the training periods outside the University

Describe the monitoring instrument and schedule of the students' opinion on the training periods outside the University and make available the monitoring questionnaire and the results at least for the last three cohorts for which full surveys are available.

#### Students' opinion on the periods of mobility

Describe the monitoring instrument and schedule of the students' opinion on the periods of mobility and make available the monitoring questionnaire and the results at least for the last three cohorts for which full surveys are available.

#### Opinion of the final year students on educational process and support services

Describe the monitoring instrument and schedule of the final year students' opinion 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.

## **Quality Requirement D5 - Graduates' placement**

The study programme should monitor the graduates' placement in order to check the demand of the granted qualification and the correspondence of the educational objectives and learning outcomes of the study programme to the educational needs of the labour market.

#### **Expected Activities**

In order to check the demand of the granted qualification and the correspondence of the SP educational objectives and learning outcomes to the educational needs of the labour market, the SP should monitor the graduates' placement in the labour market through the survey of the following data at least:

- the percentage of employed graduates;
- the placement time in the labour market;
- the effectiveness of the degree in the working activity (where for 'effectiveness' it is intended both the formal and substantial necessity of the degree in the working activity and the use of the acquired competences);

after 1÷3 years since graduation.

For this monitoring the SP should define the monitoring instrument (e.g.: on-line questionnaires, paper questionnaires, interviews, etc.) and schedule and should gather the monitoring results.

Furthermore, the first cycle SPs should gather the results relative to graduates who prosecute the studies in second cycle programmes and the second cycle SPs should gather the results relative to graduates who prosecute the studies in PhD programmes after 1 year from their graduation.

#### **Required Documentation**

#### Graduates' job placement

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 SPs 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' opinion on the graduates' education

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

#### **Expected Activities**

In order to check the correspondence of the SP educational objectives and learning outcomes to the educational needs of the labour market, the SP should monitor the opinion of the employed graduates on the education received and of the employers on the graduates' education.

The SP should monitor the opinion of the employed graduates on the education received at least once after 1÷5 years since graduation.

For this monitoring the SP should define the monitoring instrument (e.g.: on-line questionnaires, paper questionnaires, interviews, focus groups, etc.) and periodicity (e.g.: annual, every three years, etc.) and should gather the monitoring results (also with reference to the number of graduates involved in the monitoring).

The SP should also monitor the opinion of the employers on the education of the graduates at least every  $3 \div 5$  years.

For this monitoring the SP should define the monitoring instrument (e.g.: on-line questionnaires, paper questionnaires, interviews, focus groups, etc.) and periodicity (e.g.: every three years, etc.) and should gather the monitoring results (also with reference to the number of employers involved in the monitoring).

#### **Required Documentation**

#### Employed graduates' opinion on the education received

Describe the monitoring instrument and schedule of the employed graduates' opinion 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' opinion on the graduates' education

Describe the monitoring instrument and schedule of the employers' opinion 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 study programme belongs to should have a public quality assurance policy and an effective organization for the quality assurance of study programmes. The policy should be put into practice through the definition and adoption of an appropriate and effective management system, able to assure the quality of the study programme and the continual improvement of the effectiveness of the processes for the study programme management and of the associated results.

## **Quality Requirement E1 - Policy and organization for quality assurance of study programmes**

The institution the study programmes belongs to should have a public policy and an effective organization for the quality assurance of study programmes, and effective decision-making processes.

## **Expected Activities**

The institution the SP belongs to should pursue an adequate policy for the QA of SPs, in order to realise its vision of the quality of its SPs<sup>12</sup> and to develop a quality culture.

The policy for the QA of SPs should take into account both the national context in which the institution operates and the institutional context.

Such a policy should support:

- the organisation of the QA system of the SPs. To this end, the policy should regard education provided (in particular with respect to the interrelation between education and development of the subject area and professional field of reference at national and international level, and the embedding of research in education), staff, facilities and student support services, monitoring of the results of the educational processes, management system of the SPs.
- The development of a quality culture, according to which institutional leadership, individual staff members and students take on their responsibilities in the QA of SPs.
- The involvement of external stakeholders (alumni, representatives of the professional field) in the QA of SPs.

In order to contribute to the accountability of the institution, the policy should have a formal status and be publicly available.

Furthermore, the institution the SP belongs to should keep under control the implementation of its policy and the quality of its SPs, and pursue the improvement of the SPs' quality wherever required, thus contributing to the quality culture within the institution.

To this end, the institution should define an effective organisation for the QA of SPs, which clearly defines responsibilities and duties, and effective decision-making processes.

The institution should also carry out the revision of its policy and organization for the QA of SPs according to an approved plan.

## **Required Documentation**

Policy for quality assurance

Make available the document/s where vision of the quality and policy for the QA of SPs of the institution the SP belongs to are registered.

<sup>&</sup>lt;sup>12</sup> The vision of the quality of SPs pertains to the institution's ambition regarding the quality of its education and requirements regarding the quality of its SPs.

#### Organization for quality assurance

List the positions of responsibilities for the QA of SPs of the institution the SP belongs to and make available at least the following information for each position of responsibility identified:

- composition (only in case of positions of responsibility composed by more people);
- duties.

Describe the decision-making processes.

Provide also the timetable for the revision of the policy and organization for the QA of SPs.

Provide only information properly documented.

## **Quality Requirement E2 - Management system of the study programme**

The study programme should implement an appropriate and effective management system, through the identification of the quality assurance processes and the definition of a relevant organisational structure.

#### **Expected Activities**

The definition of a management system requires firstly the identification of the processes for the SP management. They should include at least the QA processes considered fundamental by the EQUASP approach. Furthermore, the processes composed by more sub-processes, whose management is in charge of different positions of responsibility (e.g.: a single person, a team of persons, a committee, a commission, etc.), should be subdivided in the component sub-processes up to the level at which it is possible to identify the positions of responsibility in charge of their management without ambiguities.

Then the definition of a management system requires the definition of an organisational structure, i.e. of the responsibilities for the management of the identified processes/sub-processes, able to assure their adequate management. To this end, the SP should identify the position of responsibility (person, commission, committee, etc.) in charge of the management of each process/sub-process identified.

The SP should also define the timescales for the implementation of the processes for its management.

#### **Required Documentation**

#### Management system of the study programme

List the processes for the SP management and the responsibilities for their management.

For this purpose, a 'responsibility matrix' as the one proposed in Annex E2.1 could be used, with the indication for each identified process or sub-process of:

- the responsible of the process/sub-process;
- the position/s of responsibility collaborating in the process/sub-process management (optional);
- the document/s where the activities and/or the results of the process/sub-process under consideration are registered.

List the positions of responsibilities for the SP management and make available at least the following information for each position of responsibility identified:

- composition (only in case of positions of responsibility composed by more people);
- duties.

For this purpose, the table of Annex E2.2 could be used.

Provide also the timescales for the implementation of the processes for the SP management.

Provide only information properly documented.

#### **Ouality Requirement E3 - Review**

The study programme should periodically review needs and objectives, educational process,

resources, results and management system, in order to guarantee their constant adequacy and effectiveness and 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.

#### **Expected Activities**

The review is a periodic and scheduled process, finalised to the improvement of the SP.

To this end the SP should first of all define the management modalities of the review (in any case the review should involve the teaching staff, the enrolled students and the stakeholders of the labour market), its periodicity, the period of the academic year in which it should be carried out and the information and data to be taken into account, which should include at least:

- changes in the national laws and norms and/or in the statute and by-laws of the structure the SP belongs to;
- resolutions of the structure the SP belongs to and/or of its own bodies;
- outcomes of the stakeholders' consultation:
- developments in the disciplines characterizing the SP;
- needs and availability of resources;
- results of the monitoring activities;
- results of the self-assessment and external assessment activities.

All these information should be properly documented.

The review must start with a self-assessment finalised to the identification of the strengths and weaknesses of the SP, through at least the comparison of the SP results with those obtained in the preceding years and the results obtained by other SPs of the same typology, if any, and to the identification of the causes of the weak points (e.g.: causes of the dropouts, motivations of delays in graduation, etc.).

The self-assessment may bring to the identification of needs of revision or redefinition of the educational objectives and process and of the iQA system, and of opportunities of improvement of the management and/or of the results of single processes.

Then, for each identified need of revision and for each opportunity of improvement, the SP should identify and adopt opportune improvement actions.

The results of the review should be documented in a Review Report.

## **Required Documentation**

#### Management of the review process

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.

#### **Results of the review process**

Make available the Review Report.

A check-list for the review coherent with the EQUASP Model is shown in Annex E3.

## **Quality Requirement E4 - Publicly availability of information**

The study programme should make publicly available full, up to date, easily acquired information, both quantitative and qualitative, on study programme objectives, educational process, resources, results and management system.

#### **Expected Activities**

All the required documentation for the QA of the SP should be made available on the web site of the SP or of the structure the SP belongs to.

In particular, at least information and data associated to Standard A, Standard B - Quality

Requirements B1 and B2, Standard C - Quality Assurance Requirements C1, C2, C3 and C4 should be available for all the stakeholders.

#### **Required Documentation**

#### Publicity of the documentation for the QA of the SP

Make available all the required documentation on the web site of the SP or of the structure the SP belongs to.

#### References

- [1] Tuning Educational Structures in Europe, <a href="http://www.unideusto.org/tuningeu/home.html">http://www.unideusto.org/tuningeu/home.html</a>
- [2] TUNING, *Universities' contribution to the Bologna Process. An introduction*, <a href="http://www.unideusto.org/tuningeu/publications.html">http://www.unideusto.org/tuningeu/publications.html</a>
- [3] ENQA and others, Standards and Guidelines for Quality Assurance in the European Higher Education Area, http://www.enqa.eu/wp-content/uploads/2015/11/ESG\_2015.pdf
- [4] ENAEE, EUR-ACE Framework Standards and Guidelines (EAFSG), <a href="http://www.enaee.eu/wp-content/uploads/2012/02/EAFSG\_full\_nov\_voruebergehend.pdf">http://www.enaee.eu/wp-content/uploads/2012/02/EAFSG\_full\_nov\_voruebergehend.pdf</a>
- [5] AEER, *Criteria and procedure for accrediting programs in engineering and technology*, <a href="http://aeer.ru/en/norm-document.htm">http://aeer.ru/en/norm-document.htm</a>
- [6] TUNING, A Guide to Formulating Degree Programme Profiles, Including Programme Competences and Programme Learning Outcomes, <a href="http://www.unideusto.org/tuningeu/publications.html">http://www.unideusto.org/tuningeu/publications.html</a>
- [7] Bologna Working Group on Qualifications Frameworks, A Framework for Qualifications of the European Higher Education Area, <a href="http://www.bolognaprocess.it/content/index.php?action=read\_cnt&id\_cnt=6118">http://www.bolognaprocess.it/content/index.php?action=read\_cnt&id\_cnt=6118</a>