THE DECREE OF THE RECTOR OF UNIVERSITAS NEGERI SURABAYA
NUMBER 598/UN38/HK/AK/2019

CONCERNING
THE CONVERSION OF NATIONAL CREDIT SYSTEM TO
EUROPEAN CREDIT TRANSFER SYSTEM

Considering:

1. that International Accreditation is an acknowledgment of the quality of an educational institution by an authorized agency/organization according to the evaluation criteria of an accreditation institution.
2. that recognition of quality from external parties including input, process, output, outcomes, and quality assurance system in higher education
3. that the government realizes the importance of higher education quality and there is a need to develop a holistic quality assurance system to improve academic quality in enhancing the quality standards of education, research, and services in Indonesia to meet the international standards continuously
4. that it requires a credit equivalent (Credit Unit) applied by Universitas Negeri Surabaya toward the European credit transfer system to be counted when used to apply advance study in Europe.

Referring to:

1. Regulation of the Minister of Education and Culture Republic of Indonesia Number 26 of 2007 concerning Cooperation of Higher Education in Indonesia with Universities or Other Institutions Abroad
2. Regulation of the Minister of Education and Culture Republic of Indonesia number 3 of 2020 concerning National Education Standards.
3. Regulation of the minister of Education and Culture Republic of Indonesia number 5 of 2020 concerning Accreditation of Study Programs and Higher Education.
4. Decree of the Minister of Education Republic of Indonesia number 83 / P / 2020 concerning International Accreditation Institutions and can be a reference for institutions to apply for international recognition / accreditation.
5. ECTS guidelines, European Union 2015

Stipulated in Surabaya
6 June 2019
THE RECTOR OF UNIVERSITAS NEGERI SURABAYA,
sign

NURHASAN
NIP. 196304291990021001

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THE DECREE OF THE RECTOR OF UNIVERSITAS NEGERI SURABAYA
NUMBER 598/UN38/HK/AK/2020

CONCERNING
THE CONVERSION OF NATIONAL CREDIT SYSTEM TO EUROPEAN CREDIT TRANSFER SYSTEM

RECTOR OF UNIVERSITAS NEGERI SURABAYA,

Considering :

a. that International Accreditation is an acknowledgment of the quality of an educational institution by an authorized agency/organization according to the evaluation criteria of an accreditation institution;
b. that recognition of quality from external parties including input, process, output, outcomes, and quality assurance system in higher education;
c. that the government realizes the importance of higher education quality and there is a need to develop a holistic quality assurance system to improve academic quality in enhancing the quality standards of education, research, and services in Indonesia to meet the international standards continuously;
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4. Decree of the Minister of Education Republic of Indonesia number 83/P/2020 concerning International Accreditation Institutions and can be a reference for institutions to apply for international recognition/accreditation;
5. ECTS guidelines, European Union 2015;

DECIDING :

Stipulating	:	DECREE OF THE RECTOR OF THE STATE UNIVERSITY OF SURABAYA CONCERNING DETERMINATION OF THE EQUALITY OF THE UNESA SEMESTER CREDIT SYSTEM (SKS) AND THE EUROPEAN CREDIT TRANSFER SYSTEM (ECTS).
FIRST	:	For the Undergraduate Program, Base on the regulation of the minister of education and culture of Indonesia number 3 of 2020 concerning National Higher Education Standards, it is stated 1 CU equals to 170 minutes per week. Therefore, in one semester (14 weeks) 1 CU = 170 minutes x 14 = 2380 minutes or 39.67 hours. UNESA decided that 1 ECTS = 25 hours/semester, so that 1 CU = 1.59 ECTS (39.67/25).
SECOND	:	For magister program, 1 CU equals 240 minutes (50 minutes face to face and 90 minutes assignment, 100 minutes independently so 1 CU = 2.24 ECTS.
THIRD	:	For doctoral, 1 CU equals 270 minutes (50 minutes face-to-face and 100 minutes assignment, 120 minutes independently so 1 CU=2.52 ECTS.
FOURTH	:	The calculation of the determination of the credit score equation can be used for students who will transfer to UNESA or UNESA students who will go to education areas in Europe with the terms and conditions apply.
FIVE	:	This Rector's Decree comes into effect on June 10, 2019.

Stipulated in Surabaya
on 10 June 2020
THE RECTOR OF UNIVERSITAS NEGERI SURABAYA,

Sign

NURHASAN
NIP 196304291990021001

The copy corresponds to the original.
Vice Chancellor for General Affairs and Finance,

SUPRAPTO
NIP 196904021994031002

ECTS Users' Guide

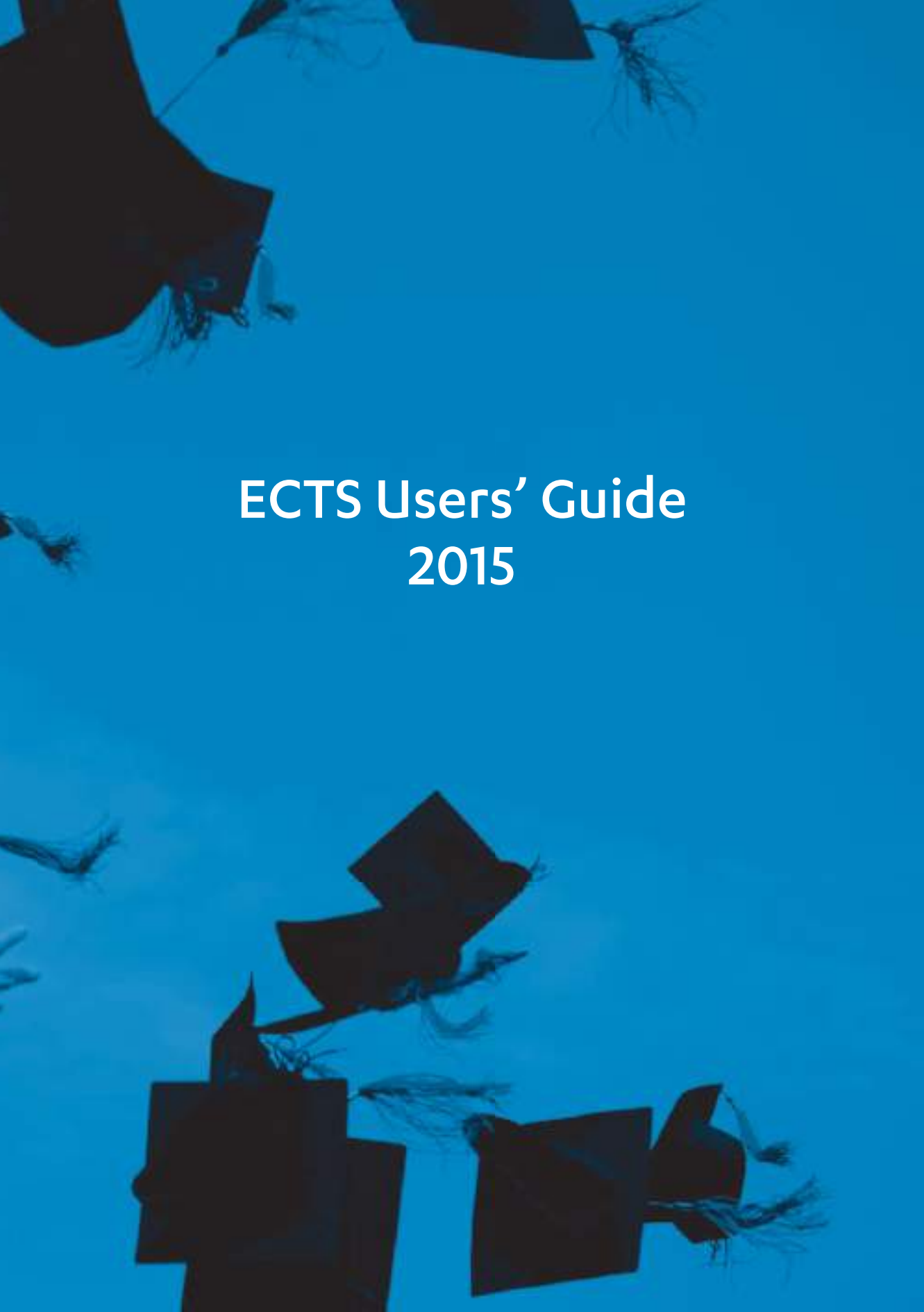


EUROPEAN
Higher Education Area

bologna process

European Commission





ECTS Users' Guide 2015

Contents

Introduction **6**

Section 1 ECTS key features **10**

Section 2 ECTS and the European Higher Education Area (EHEA) **14**

Section 3 ECTS for programme design, delivery and monitoring **18**

3.1 The programme context 19

3.2 The programme profile 21

3.3 The programme learning outcomes 23

3.4 The programme structure and allocation of credits 24

3.5 Learning, teaching and assessment 26

3.6 Monitoring of credit allocation 28

Section 4 ECTS for mobility and credit recognition **30**

4.1 Degree mobility 30

4.2 Credit mobility 34

4.2.1 Before the credit mobility period 35

4.2.2 After the credit mobility period 36

4.2.3 Institutional rules and regulations 37

4.3 Grade distribution 39

4.4 Grade conversion 41

Section 5 ECTS and lifelong learning **44**

5.1 Lifelong learning – open learning opportunities 44

5.2 Recognition of prior learning and experience 46

Section 6 ECTS and quality assurance **50**

Section 7 ECTS and supporting documents **54**

7.1 Course Catalogue 54

7.2 ECTS and supporting documents for credit mobility 57

7.2.1 Learning Agreement for credit mobility for studies 58

7.2.2 Learning Agreement for work placements 58

7.3 Transcript of Records 60

7.4 Work Placement Certificate 61

Acknowledgements **64**

Annex 1 Glossary **66**

Annex 2 Examples: grade conversion **80**

Annex 3 Recommended reading list **84**

Annex 4 Examples: programme profiles **92**

Annex 5 Examples: learning outcomes **104**

Introduction

The European Credit Transfer and Accumulation System (ECTS) is a tool of the European Higher Education Area (EHEA) for making studies and courses more transparent and thus helping to enhance the quality of higher education.

ECTS was instituted in 1989, within the Erasmus programme, as a way of transferring credits that students earned during their studies abroad into credits that counted towards their degree, on their return to studying in their home institution. In the following years, it came to be used not only for transferring credits, on the basis of workload and achieved learning outcomes, but also for accumulating them in institutions' degree programmes. ECTS helps in the design, description and delivery of programmes, makes it possible to integrate different types of learning in a lifelong learning perspective, and facilitates the mobility of students by easing the process of recognising qualifications and periods of study. ECTS can be applied to all programmes, whatever the mode of delivery (classroom-based, work-based, distance learning) or the status of students (full-time, part-time), and to all kinds of learning contexts (formal, non-formal and informal).



The ECTS Users' Guide offers guidelines for implementing ECTS and links to useful supporting documents. Following the request from Bologna Ministers in Bucharest (Bucharest Communiqué, 2012), the ECTS Users' Guide of 2009 has been revised, in order to strengthen the 'meaningful implementation of learning outcomes' in the EHEA. The Guide takes forward the objective of Ministers to 'call on institutions to further link study credits with both learning outcomes and student workload and to include the attainment of learning outcomes in assessment procedures'. This revised version is based on a solid foundation of work done in recent years, both within the Bologna Process and in individual countries, to help the academic community and other stakeholders in higher education to move in the direction of the changes advocated by the Bologna Process.

The revised Guide takes into account recent developments in the Bologna Process such as the establishment of the EHEA, the consolidation of lifelong learning, the paradigm shift from teacher-centred to student-centred higher education, the increasing use of learning outcomes, and the development of new modes of learning and teaching. It includes a specific focus on programme design and delivery, and builds on the experience of higher education institutions in using qualifications frameworks and in applying ECTS principles in academic practice.

The Guide is offered to students and other learners, academic and administrative staff in higher education institutions as well as to employers, education providers and all other interested stakeholders. For ease of reading, the term 'student' is used to refer to all learners in higher education institutions (whether full-time or part-time, engaged in distance, on-campus or work-based learning, pursuing a qualification or following stand-alone educational units or courses).

The revised Guide has been written by a working group of practitioners appointed by Bologna countries and stakeholders' associations. It has been submitted for consultation to stakeholders' associations, experts from countries in the EHEA, and the Bologna Follow-up Group. The European Commission has coordinated the drafting and consultation process. Finally, the Guide has been adopted by Ministers for Higher Education of the European Higher Education Area in 2015 at the Yerevan ministerial conference. It is therefore the official Guide for the use of ECTS.

1 ECTS key features



ECTS key features

ECTS is a learner-centred system for credit accumulation and transfer, based on the principle of transparency of the learning, teaching and assessment processes. Its objective is to facilitate the planning, delivery and evaluation of study programmes and student mobility by recognising learning achievements and qualifications and periods of learning.

ECTS credits express the volume of learning based on the defined learning outcomes and their associated workload. 60 ECTS credits are allocated to the learning outcomes and associated workload of a full-time academic year or its equivalent, which normally comprises a number of educational components to which credits (on the basis of the learning outcomes and workload) are allocated. ECTS credits are generally expressed in whole numbers.

Learning outcomes are statements of what the individual knows, understands and is able to do on completion of a learning process. The achievement of learning outcomes has to be assessed through procedures based on clear and transparent criteria. Learning outcomes are attributed to individual educational components and to programmes at a whole. They are also used in European and national qualifications frameworks to describe the level of the individual qualification.

Workload is an estimation of the time the individual typically needs to complete all learning activities such as lectures, seminars, projects, practical work, work placements[1] and individual study required to achieve the defined learning outcomes in formal learning environments. The correspondence of the full-time workload of an academic year to 60 credits is often formalised by national legal provisions. In most cases, workload ranges from 1,500 to 1,800 hours for an academic year, which means that one credit corresponds to 25 to 30 hours of work. It should be recognised that this represents the typical workload and that for individual students the actual time to achieve the learning outcomes will vary.

[1] This Guide uses « work placement » or « placement », « training period », « internship » and « traineeship » as synonyms.

Allocation of credits in ECTS is the process of assigning a number of credits to qualifications, degree programmes or single educational components. Credits are allocated to entire qualifications or programmes according to national legislation or practice, where appropriate, and with reference to national and/or European qualifications frameworks. They are allocated to educational components, such as course units, dissertations, work-based learning and work placements, taking as a basis the allocation of 60 credits per full-time academic year, according to the estimated workload required to achieve the defined learning outcomes for each component.

Awarding credits in ECTS is the act of formally granting students and other learners the credits that are assigned to the qualification and/or its components if they achieve the defined learning outcomes. National authorities should indicate which institutions have the right to award ECTS credits. Credits are awarded to individual students after they have completed the required learning activities and achieved the defined learning outcomes, as evidenced by appropriate assessment. If students and other learners have achieved learning outcomes in other formal, non-formal, or informal learning contexts or timeframes, credits may be awarded through assessment and recognition of these learning outcomes.

Accumulation of credits in ECTS is the process of collecting credits awarded for achieving the learning outcomes of educational components in formal contexts and for other learning activities carried out in informal and non-formal contexts. A student[2] can accumulate credits in order to:

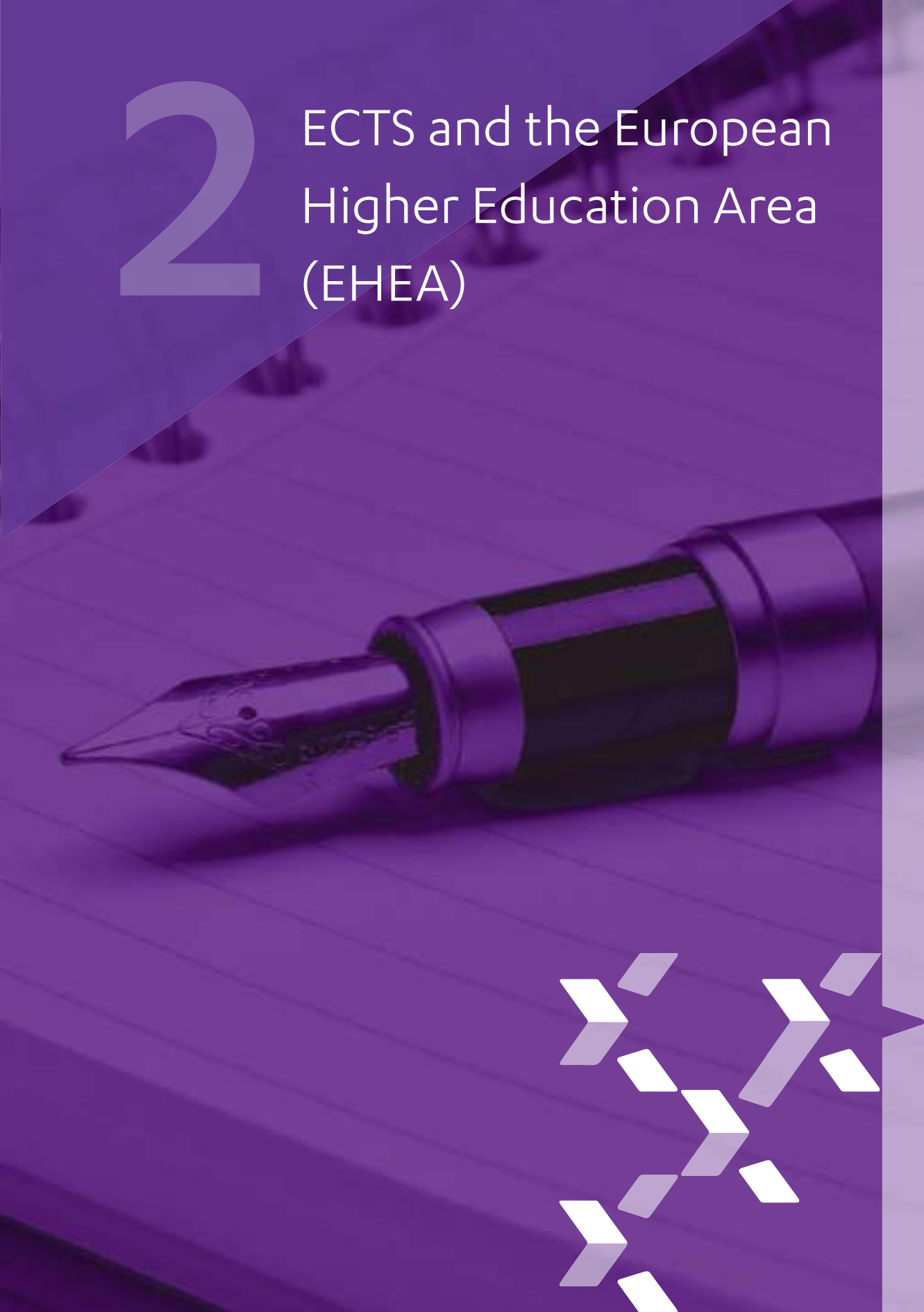
- obtain qualifications, as required by the degree-awarding institution;
- document personal achievements for lifelong learning purposes.

[2] The question of whether to refer to 'students' or 'learners' was discussed in depth in the working group and with stakeholders. The position reached recognises and welcomes the fact that higher education is moving towards more flexible provision; it also recognises the fact that most higher education systems are organised around provision of formal programmes to a clearly defined student body. While it was deemed premature to use only the term 'learner' in the Guide, the term 'student' is used to encompass all learners in higher education institutions (whether full-time or part-time, engaged in distance, on-campus or work-based learning, pursuing a qualification or following stand-alone educational units or courses).

Transfer of credits is the process of having credits awarded in one context (programme, institution) recognised in another formal context for the purpose of obtaining a qualification. Credits awarded to students in one programme may be transferred from an institution to be accumulated in another programme offered by the same or another institution. Credit transfer is the key to successful study mobility. Institutions, faculties, departments may make agreements which guarantee automatic recognition and transfer of credits.

ECTS documentation: The use of ECTS credits is facilitated and quality enhanced by the supporting documents (Course Catalogue, Learning Agreement, Transcript of Records, and Work Placement Certificate). ECTS also contributes to transparency in other documents such as the Diploma Supplement.

2 ECTS and the European Higher Education Area (EHEA)



ECTS and the European Higher Education Area (EHEA)

In 1999 the Bologna Declaration included ECTS among the main objectives to be achieved by countries participating in the Bologna Process. Through the reforms implemented in the course of the Process, ECTS has become a key tool of the European Higher Education Area (EHEA).

ECTS is adopted as the national credit system in most countries of the EHEA. In other regions of the world, it is increasingly used by institutions or interacts successfully with local credit systems[3] based on comparable criteria, thus playing a role in the growing global dimension of education.

Within the EHEA, ECTS increases the transparency and readability of the educational process and thus plays an effective role in stimulating change and modernisation, because its implementation encourages the paradigm shift from a teacher-centred to a learner-centred approach, which is, under the term of Student-Centred Learning (SCL), recognised as an underlying principle of the EHEA.

By using learning outcomes and workload in curriculum design and delivery, ECTS places the student at the centre of the educational process. Moreover, using credits makes it easier to create and document flexible learning pathways, thus allowing students greater autonomy and responsibility.

Due to its outcome-based approach, the use of ECTS serves other purposes of the EHEA:

- It facilitates the recognition of prior learning and experience and encourages a higher level of completion and wider participation in lifelong learning;
- It establishes a closer link between educational programmes and societal requirements and enhances interaction with all stakeholders, including the world of work and wider society;
- It facilitates mobility within an institution or country, from institution to institution, from country to country, and between different educational sectors and contexts of learning (i.e. formal, non-formal, informal and work-based learning), through recognition and credit transfer.

In national legislation the use of ECTS can be a requirement for accreditation of higher education programmes or qualifications.

[3] ECTS has inspired the development of credit systems in other regions, for example in Southeast-Asia, Latin America and most recently in Africa.

Nota Bene

Student-Centred Learning (SCL) is a process of qualitative transformation for students and other learners in a learning environment, aimed at enhancing their autonomy and critical ability through an outcome-based approach.

The SCL concept can be summarised into the following elements:

- Reliance on active rather than passive learning;
- Emphasis on critical and analytical learning and understanding;
- Increased responsibility and accountability on the part of the student;
- Increased autonomy of the student;
- A reflective approach to the learning and teaching process on the part of both the student and the teacher.

3 ECTS for programme design, delivery and monitoring



ECTS for programme design, delivery and monitoring

This section deals with the design of educational programmes by higher education institutions (HEIs) or by other providers. The use of ECTS credits aids programme design by providing a tool which improves transparency and helps to engender a more flexible approach to curriculum design and development.

From an institutional perspective, designing a programme means planning a curriculum and its components in credits, indicating learning outcomes and associated workload, learning activities and teaching methods and assessment procedures/criteria. The institutional credit framework should cater for the needs of different programmes and support inter- and multi-disciplinary approaches.

The use of ECTS in HEIs requires both an institutional credit framework based on institutional regulations and a profound understanding of the system by each member of the academic staff. Some institutions foster this understanding by regular training for staff members. Team-based decisions on programme design enhance the coherence of the programme.

Nota Bene

An **independent learner** may accumulate the credits required for the achievement of a qualification through a variety of learning modes. She/he may acquire the required knowledge, skills and competence in formal, non-formal and informal contexts: this can be the result of an intentional decision or the outcome of different learning activities over time. The learner may select educational components without immediate orientation towards a formal qualification. ECTS supports this process, as described in Section 5 on Lifelong Learning.

The following steps have been identified as helpful in designing programmes.

3.1 The programme context

When a new programme is developed, the first decision typically concerns the level of the qualification to be awarded, which is defined on the basis of the relevant national legislation and existing qualifications frameworks (European, national, sectoral, institutional).

It will be evident that not all learning outcomes are at the same level – hence the full implementation of a credit system requires level descriptors.

Nota Bene

There are two European Qualifications Frameworks: the Framework for Qualifications of the European Higher Education Area (QF-EHEA) and the European Qualifications Framework for Lifelong Learning of the EU (EQF-LLL). Both frameworks use learning outcomes to describe qualifications (e.g. Bachelor, Master, Doctor) and are compatible with each other as far as Higher Education is concerned (QF-EHEA cycles 1, 2 and 3 correspond to EQF-LLL levels 6, 7 and 8) and cover qualifications at ISCED levels 6, 7, 8.

In the **QF-EHEA**, three main cycles, as well as a short cycle, are identified and described by the so-called Dublin Descriptors, in terms of: applying knowledge and understanding, making judgments, communication skills, and learning to learn. The short, first and second cycles are also characterised by credit ranges:

- Short cycle qualifications typically include approximately 120 ECTS credits.
- First cycle qualifications typically include 180 or 240 ECTS credits.
- Second cycle qualifications typically include 90 or 120 ECTS credits, with a minimum of 60 ECTS credits at the level of the second cycle.
- The use of ECTS in the third cycle varies.

Nota Bene

The **EQF-LLL** describes 'levels of qualification' (without indicating any credit ranges) – to provide a common reference framework which assists in comparing the national qualifications systems, frameworks and their levels. It is based on eight levels.

- As an instrument for the promotion of lifelong learning, the EQF encompasses general and adult education, vocational education and training as well as higher education.
- The eight levels cover the entire span of qualifications from those achieved at the end of compulsory education to those awarded at the highest level of academic and professional or vocational education and training.
- Each level should in principle be attainable by way of a variety of education and career paths.
- Learning outcomes are specified in three categories – as knowledge, skills and competence. This signals that qualifications – in different combinations – capture a broad scope of learning outcomes, including theoretical knowledge, practical and technical skills, and social competences where the ability to work with others will be crucial.

The different cycles of QF-EHEA are referenced to the levels of EQF-LLL as follows:

- Short-cycle qualifications at level 5
- First-cycle qualifications at level 6
- Second-cycle qualifications at level 7
- Third-cycle qualifications at level 8

National education systems may include levels other than those included in the overarching frameworks as long as national frameworks are self-certified and referenced against the QF-EHEA and the EQF. For example, while the EQF comprises 8 levels, the number of levels in national frameworks currently ranges from 7 to 12. Therefore, the fact that short cycle qualifications are included in the QF-EHEA does not oblige countries to include such qualifications in their national frameworks but it gives explicit recognition to the fact that many national frameworks do include short cycle qualifications.

The QF-EHEA and the EQF provide overarching frameworks against which national and institutional frameworks and descriptors should be calibrated.

National frameworks are normally more detailed than these overarching frameworks, reflecting the range of tertiary qualifications offered in the country.

Higher Education Institutions which implement ECTS as a credit system will need an institutional framework which correlates with the national and international frameworks. The institutional framework will indicate how ECTS credits are to be used, normally specifying a minimum credit value for an educational component to facilitate inter/multi-disciplinary programmes (which will be created by combining educational components from across a range of disciplines). European and national frameworks indicate the level of the final qualification. Thus, institutions, recognising that not all credits acquired in progressing towards a qualification are at the same level (learning outcomes achieved in the third year of a Bachelor degree, for example, will tend to be more complex than those achieved in the first year) – may specify intermediate credit levels with appropriate descriptors which (together with progression rules) will help students in progressing along their learning pathways.

Before designing the programme in detail, it should be set in the context of institutional and departmental mission statements, professional specifications (regulations, requirements), and the institutional academic framework for credit allocation.

It is also recommended to carry out a needs analysis and to consult with stakeholders (employers, graduates, society at large) to ascertain the demand for the programme.

3.2 The programme profile

The profile presents the distinctive features of the programme (Lockhoff et al., 2010). It indicates the field(s) of study (which may be expressed in ISCED-F codes), the level of the programme, the main focus, the key learning outcomes expected on completion, the learning environment and the main learning, teaching and assessment activities. An effective programme profile will make it clear to students and stakeholders what generic and subject specific competences will be developed and the employability potential of the programme. For this purpose, it is recommended that the profile is defined in consultation with relevant stakeholders (such as academic peers, social partners, employers, graduates, and student representatives) and is presented in a clear and transparent way.

The profile should be part of the programme description included in the Course Catalogue.

Nota Bene

Across the EHEA, the terms 'learning outcomes' and 'competence' are used with different shades of meaning and in somewhat different frames of reference.

For the purpose of this Guide:

Competence means 'the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy' (Recommendation 2008/C 111/01). Competences can be generic or subject–specific. Fostering competences is the object of a process of learning and of an educational programme.

Learning outcomes express the level of competence attained by the student and verified by assessment. They are 'statements of what a learner knows, understands and is able to do on completion of a learning process' (Ibid.). They are formulated by academic staff, involving students and other stakeholders. In order to facilitate assessment, these statements need to be verifiable.

3.3 The programme learning outcomes

The programme learning outcomes are based on the programme profile and describe what a student knows, understands and is able to do on completion of the programme.

Nota Bene

Formulating programme learning outcomes

Considerable care needs to be taken in formulating learning outcomes. The following non-exhaustive list provides a set of guidelines which has proved to be helpful.

- The learning outcomes should adequately reflect the context, level, scope and content of the programme.
- The statements of learning outcomes have to be succinct and not too detailed.
- The learning outcomes have to be mutually consistent.
- The learning outcomes should be easily understandable and verifiable in terms of what the student has actually achieved at the end of the programme.
- The learning outcomes have to be achievable within the specified workload.
- The learning outcomes have to be linked with appropriate learning activities, assessment methods and assessment criteria.
- There are no rules on the ideal number of learning outcomes at programme level. Experience suggests that between 10 and 12 is appropriate.
- A widely accepted way of formulating learning outcomes is based on three essential elements.
    1. Use an active verb to express what students are expected to know and be able to do (e.g. graduates can 'describe', 'implement', 'draw conclusions', 'assess', 'plan').
    2. Specify what this outcome refers to (object or skill e.g. can explain the 'function of hardware-components', or can present the 'design of a living-room by hand').
    3. Specify the way of demonstrating the achievement of learning outcomes (e.g. 'to give an overview of the materials most often used in electro-engineering'; 'to develop a research design by applying up-to-date scientific methods', etc.).

The programme learning outcomes should be included in the Course Catalogue and in the Diploma Supplement.

3.4 The programme structure and allocation of credits

The programme profile is broken down into educational components which may consist of single or several modules, other types of course unit, work and clinical placements, research projects, laboratory work and other relevant learning activities. They may also include social and community activities (for example, tutoring and mentoring) provided they fit the programme learning outcomes and carry credits.

Learning outcomes, with related assessment strategies and assessment criteria, should be defined for each educational component.

The learning outcomes of the programme and of its educational components are often mapped to demonstrate their mutual reinforcement. Many institutions use a matrix to correlate the learning outcomes of the degree programme with those of its educational components.

Nota Bene

Learning outcomes in educational components

The principles for formulating learning outcomes for educational components are the same as for programme learning outcomes.

There are no absolute rules on the ideal number of learning outcomes for an educational component. It will depend on the level and the nature of the unit, as well as the estimated workload. However, good practice suggests that the number should be limited and general experience indicates that 6 to 8 is an appropriate number.

The annex contains a recommended literature list with guidelines on learning outcomes.

After the constituent parts of the programme have been identified, the overall structure should be outlined and credits allocated to each component, on the basis of its learning outcomes and associated workload, taking into account that 60 credits correspond to a full-time-equivalent academic year.

When educational components are of regular size (e.g. 5, 10, 15) they are often called 'modules'. In a programme made up of modules (a modularised structure), half credits may be used when justified (for example, in the case of 4 modules per semester), but other decimals should be avoided. It is helpful if the institution determines the basic credit currency in terms of the minimum number of credits for a component as this will facilitate collaboration on curricula across subjects and faculties.

Establishing 'mobility windows' in the curriculum will facilitate learning mobility. Mobility windows may be prescribed both in content and timing in the programme design or may allow flexibility in timing and in content for the individual student. Mobility windows are preferably not used to replicate what would be studied at home, but to allow students to benefit from diverse educational experiences in other settings.

Progression requirements must be explicit if students are to navigate the programme successfully and obtain the intended qualification. Progression requirements may include inter alia prerequisites, co-requisites and recommendations. Progression rules may be expressed in terms of the numbers of credits or credit ranges required at different stages within a programme of study (e.g. a minimum number of credits required to pass from one academic year/semester to another). They may also be formulated in terms of detailed rules on what components must and/or can be taken at what stage and of what level (e.g. compulsory courses, optional courses and prerequisites).

Independent learners joining a formal programme should receive appropriate counselling/advice to support them in complying with progression requirements. Where relevant, this counselling should include recognition of prior learning and experience. Flexible programme structures allow students' choice, including by incorporating possibilities to access new modes of learning and teaching.

3.5 Learning, teaching and assessment

Higher education institutions need to define their learning and teaching objectives in relation to their study programmes and how they should be delivered and assessed.

General principles for learning, teaching and assessment

Some general principles concerning learning, teaching and assessment should be taken into account when delivering a programme of study, regardless of the mode of learning and teaching.

Open dialogue and participation

The student-centred approach requires an open dialogue and reflective feedback between students, teachers and the relevant administrators, through which their needs and aspirations can be expressed and discussed. All stakeholders should be involved in constructive discussion of programme design and delivery. Student representatives should participate in such discussions with full voting powers.

Transparency and reliability

The Course Catalogue should provide reliable, up-to-date and quality assured information on degree programmes, as well as on single educational components. It should provide an accurate description of the degree programme, including all details: structure, components, learning outcomes, workload, learning/teaching approaches, assessment methods, assessment criteria, and progression rules.

Consistency

The academic staff responsible for delivering the programme and its components should ensure consistency between the learning outcomes stated in the programme, the learning and teaching activities and the assessment procedures. This constructive alignment (Biggs, 2003) between learning outcomes, learning activities and assessment is an essential requirement for educational programmes.

Flexibility

A flexible programme structure is essential to allow for students' choices and meet different needs, e.g. opportunity should be given for developing personal learning pathways and optional activities should be offered. A flexible organisation of learning, teaching and assessment activities, including flexibility in the timetable and more opportunities for independent learning is essential for accommodating different learning styles. This widens the choices of learning and teaching materials and activities, and opens up opportunities for students with different profiles or needs (e.g. people with caring responsibilities or people with disabilities). The integration of digital technologies in higher education provision is having a significant impact on learning and teaching approaches. The allocation of credits to learning outcomes which are achieved through new modes of delivery made possible by technology, are based on the same principles as the allocation of credits to learning outcomes for traditional educational components.

Appropriate assessment of achievements

Credits are awarded when appropriate assessment shows that the defined learning outcomes have been achieved at the relevant level. If the student has not achieved the learning outcomes, no credits will be awarded. The number of credits awarded to the student who demonstrates the achievement of learning outcomes is the same as the number of credits allocated to the component.

Assessment methods include the whole range of written, oral and practical tests/examinations, projects and portfolios that are used to evaluate the student's progress and ascertain the achievement of the learning outcomes of a course unit or module, whereas assessment criteria are descriptions of what the student is expected to do, in order to demonstrate that a learning outcome has been achieved.

In order to be appropriate, the assessment methods and criteria chosen for an educational component have to be consistent with the learning outcomes that have been defined for it and with the learning activities that have taken place.

Nota Bene

Doctoral education is in the process of a change – with a greater variety of routes to a doctorate and the recognition of the principle that high level training is helpful to develop third cycle generic (transferable) and subject-specific competences. In some countries and institutions, ECTS is also used in the third cycle. ECTS credits are either allocated to the whole degree programme, or to some/all educational components (e.g. taught course units).

If ECTS is used, the guidelines contained in this ECTS Users' Guide should apply, taking into account the specific nature of doctoral degrees. The related information should be included in the Course Catalogue.

Defining learning outcomes for specific milestones in the third cycle could in some cases allow candidates who interrupt their studies to have some certification of what they have achieved up to that point. It can also be valuable in demonstrating to future employers the achievement of specific high level generic and subject specific competences.

3.6 Monitoring of credit allocation

The programme is monitored to establish whether the credit allocation, the defined learning outcomes and the estimated workload are achievable, realistic and adequate. Monitoring can be managed in different ways through questionnaires, focus groups, or interviews, or by monitoring the results achieved. Whatever method is used, feedback from students, staff and where appropriate, stakeholders should constitute an essential element for checking and revising credit allocation. Data on completion times and the assessment results of programmes and their components should also be used.

It is important to inform students and staff about the purpose of the monitoring exercise, and how it will be carried out, to ensure accurate answers and a high response rate. If the information gathered reveals a discrepancy between the workload foreseen and the time actually taken by the majority of students to achieve the defined learning outcomes, it will be necessary to revise the workload, credits, learning outcomes or learning and teaching activities and methods. This could also involve redesigning the study programme and its educational components. The revision should be done as soon as possible without creating problems for those who are currently taking the programme and should be communicated to those who had participated in the monitoring exercise, in order to foster an ongoing, cooperative feedback culture in the institution.

4 ECTS for mobility and credit recognition



ECTS for mobility and credit recognition

This section deals with credit transfer and recognition in general, which takes place both in degree mobility and credit mobility.

Successful learning mobility requires academic recognition and transfer of credits. Recognition of credits is the process through which an institution certifies that learning outcomes achieved and assessed in another institution satisfy the requirements of one of the programmes they offer.

Given the diversity of programmes and HEIs, it is unlikely that the credits and learning outcomes of a single educational component in two different programmes will be identical. This is even more the case in recognising learning from other learning contexts (for example vocational education and training). An open and flexible approach to the recognition of credits obtained in another context, including learning mobility, is therefore recommended, based on compatibility of learning outcomes rather than equivalence of course contents. In practice, recognition means that the number of credits gained for compatible learning outcomes achieved in another context will replace the number of credits that are allocated for compatible learning outcomes at the awarding institution.

Institutions should make their recognition policies known and easily accessible.

4.1 Degree mobility

Degree programmes can vary in the number of ECTS credits they include (see Nota Bene box in Section 3.1). For the purposes of recognition of qualifications for further studies, the difference in the number of ECTS credits gained after successful completion of a qualification are not a consideration. The programme learning outcomes should be the main factor to be taken into account. This means, for example, that a comparable Bachelor degree should be recognised for the purpose of consideration for admission to a Master's programme, independently of whether it is based on 180 or 240 ECTS credits.

Nota Bene

The Lisbon Recognition Convention

The Lisbon Recognition Convention, which entered into force in 1999, provides a legal framework for cross-border academic recognition.

The Convention stipulates:

'36. Qualifications of approximately equal level may show differences in terms of content, profile, workload, quality and learning outcomes. In the assessment of foreign qualifications, these differences should be considered in a flexible way, and only substantial differences in view of the purpose for which recognition is sought (e.g. academic or de facto professional recognition) should lead to partial recognition or non-recognition of the foreign qualifications.

37. Recognition of foreign qualifications should be granted unless a substantial difference can be demonstrated between the qualification for which recognition is requested and the relevant qualification of the State in which recognition is sought.'

The European Area of Recognition Manual (EAR Manual, 2012) gives the following explanation for the interpretation of substantial difference:

'By focusing on the five key elements that together make up a qualification (level, workload, quality, profile and learning outcomes) and by taking substantial differences into account, competent recognition authorities have transformed their approach from expecting foreign qualifications to be almost exactly the same as those offered in their own countries, to focusing on 'recognition' by accepting non-substantial differences.

Nota Bene

Substantial differences are differences between the foreign qualification and the national qualification that are so significant, that they would most likely prevent the applicant from succeeding in the desired activity such as further study, research activities or employment.

The burden of proof of a substantial difference lies with the competent recognition authority of the host country and the accompanying guidelines are as follows:

- not every difference should be considered to be 'substantial';
- the existence of a substantial difference entails no obligation to deny recognition to the foreign qualification;
- the difference should be substantial in relation to the function of the qualification and the purpose for which recognition is sought.'

For more on the topic of substantial differences see E. Stephen Hunt and Sjur Bergan (2010).

Nota Bene

Recognition of professional qualifications

EU Directive 2013/55/EU amends Directive 2005/36/EC on the **recognition of professional qualifications.**

It allows ECTS to be used as an additional means of expressing full-time course duration in the case of the seven 'sectoral' professions. The obligation to express course duration in terms of full-time academic years and total numbers of hours will remain for medical doctors, general care nurses, dentists, and midwives. For veterinary surgeons, pharmacists and architects, the obligation covers only full-time academic years.

Similarly, ECTS may also be used in levels (d) and (e) of the qualifications grid used in the **General System**, which covers all other qualification-based regulated professions in the EU and the EEA.

The new Directive has extended its scope to the recognition of **work placements** which are necessary to have access to a regulated profession. These can be undertaken in any EU/EEA member state, irrespective of where the qualification is delivered, and enjoy full recognition. Recital 27 states that the 'recognition of a professional traineeship completed in another Member State should be based on a clear written description of learning objectives and assigned tasks, to be determined by the trainee's supervisor in the host Member State.' Article 55a requires Competent Authorities to 'publish guidelines on the organisation and recognition of professional traineeships carried out in another Member State or in a third country, in particular on the role of the supervisor of the traineeship.'

Finally, the new Directive introduces **common training frameworks** based on 'common sets of knowledge, skills and competences' required in the systems of education and training applicable in at least one third of Member States. These curricula may be proposed by representative professional bodies operating at EU or national level, or by Competent Authorities. They are to be referenced to the European Qualifications Framework and are free to make full use of ECTS.

4.2 Credit mobility

ECTS was designed to facilitate learning mobility between institutions for short-term study periods ('credit mobility'). As this Guide makes clear, ECTS has developed and been adopted for purposes of credit accumulation but it still plays a vital role in student mobility – facilitating the transfer and recognition of the achievements of the mobile student.

In ECTS, the following supporting documents help facilitate credit recognition for the purpose of mobility:

- Course Catalogue
- Learning Agreement
- Transcript of Records
- Traineeship Certificate

These documents provide information on the learning outcomes achieved, on which the qualification-awarding institution can make decisions on credit recognition and transfer. Please see chapter 7 of the European Recognition Manual for Higher Education Institutions (2014) for details. The section includes a useful flowchart on the recognition of periods of study abroad.

Nota Bene

The golden rule of recognition of credit mobility within the framework of inter-institutional agreements

All credits gained during the period of study abroad or during the virtual mobility – as agreed in the Learning Agreement and confirmed by the Transcript of Records – should be transferred without delay and counted towards the student's degree without any additional work by or assessment of the student.

4.2.1 Before the credit mobility period

In order to facilitate the organisation of credit mobility and its recognition, the three parties involved – the student, the sending institution and the receiving institution or organisation/enterprise – should agree on the programme abroad. They should formalise this in a Learning Agreement, to be signed by the three parties before the start of the mobility period. The Learning Agreement is intended to give the student the confirmation that the credits he/she successfully achieves during the mobility period will be recognised. The Erasmus+ programme provides templates for the Learning Agreement for studies and for traineeships for institutions participating in the programme. It also provides guidance for institutions on how to use the templates, and sets out specific deadlines institutions need to comply with.

The educational components to be completed during the mobility period should normally not be selected on the basis of their equivalence with single educational components offered at the sending institution. The learning outcomes of the whole programme of study abroad should be compatible with or complementary to the learning outcomes of the home degree programme for which recognition is to be granted after the study period abroad. This makes it easier for the credits gained in the receiving institution to replace flexibly an equivalent number of credits in the sending institution's degree programme. It is also possible to record the mobility period as a whole, instead of recording it component by component.

The Learning Agreement should identify a set of suitable educational components to be taken at the receiving institution and how they will be integrated into the programme of the sending institution. The number of credits to be gained at the receiving institution should be proportionate to the time of study abroad. The student is expected to take educational components of 60 ECTS per full-time academic year.

The receiving institution commits to register the incoming student in the planned educational components, verifying that these components are available for the foreseen mobility period.

Once it is signed by all three parties, the Learning Agreement can be modified thereafter, if necessary, by agreement of all three parties concerned.

Nota Bene

New modes of ICT-enabled learning allow students to access and follow courses outside their own institution ('**virtual mobility**'). Such students should be offered clear academic guidance and a Learning Agreement should be signed by the 'sending institution' and the student.

In **joint programmes** agreed mobility schemes are adopted by the partner institutions, which include the rules for the recognition of credits. Learning Agreements are not necessary used in joint programmes: the credits achieved in a partner institution are automatically recognised, if the agreed rules are followed and all conditions are satisfied. Nevertheless, the planned learning pathway has to be clear to the student and Learning Agreements are good practice.

4.2.2 After the credit mobility period

The receiving institution provides the sending institution and the student with a Transcript of Records within a reasonably short period of time (stipulated between the two institutions) after proclamation of the student's results at the receiving institution.

Upon successful completion of the set of educational components included in the Learning Agreement and confirmed by the Transcript of Records sent by the receiving institution, the sending institution should recognise fully the agreed number of ECTS credits, transfer them into the student's programme and use them to satisfy the qualification requirements. The sending institution should specify clearly how the educational components taken abroad have been integrated into the home degree programme. When applicable, grades are converted (see section 4.3). All this information should be recorded in a Transcript of Record (or equivalent document/database) made available to the student.

Institutional procedures should be defined for assessment of educational components, in case the students have not completed them successfully at the receiving institution. Such procedures should be communicated to students beforehand.

The Diploma Supplement is designed to provide graduates with a transparent record of their achievements. Therefore, the educational components successfully completed abroad will be included in the Transcript of Records attached to the Diploma Supplement with their original titles (and their translation into the language(s) in which the Diploma Supplement is issued), the indication of the institution where they have been taken and the credits and grades awarded. In the case of work placements abroad, the transfer of credits will be documented in the Work Placement Certificate and the Diploma Supplement or Europass Mobility Document. In the case of recent graduates' work placements the use of the Europass Mobility Document is strongly recommended, as their work placement takes place after their graduation and the other documents mentioned above are not relevant for them.

4.2.3 Institutional rules and regulations

Experience has shown that the following good practice facilitates the management of credit mobility and recognition.

Institutional commitment

Specific institutional rules should be developed to deal with the recognition of other learning experiences, to allow for credit accumulation and transfer through various types of mobility (including for 'free movers'), work experience, virtual learning, prior and informal learning.

The institution should clearly define responsibilities for implementing and monitoring credit mobility and ensure that application procedures and selection criteria for credit mobility are transparent and fair, and that an appeal mechanism is in place. A staff member should be appointed in each department or subject area and formally authorised to discuss the programme of study abroad with the student and to approve and sign the Learning Agreement on behalf of the sending institution, before the start of the mobility period and the Transcript of Records after the mobility period[4]. Individuals should not be asked to negotiate academic recognition with staff members who are not authorised to do so or with a committee, before or after their study abroad period, neither should the student be asked to sit for any other examinations or have to do extra work after having returned.

[4] The Erasmus+ programme provides a template for the Learning Agreement, where the requirements for responsible persons are defined as follows:

Responsible person in the sending institution: an academic who has the authority to approve the mobility programme of outbound students (Learning Agreements), to exceptionally amend them when it is needed, as well as to guarantee full recognition of such programmes on behalf of the responsible academic body.

Responsible person in the receiving institution: an academic who has the authority to approve the mobility programme of incoming students and is committed to give them academic support in the course of their studies at the receiving institution.

Selection of partner institutions

It is suggested to make exchange agreements with institutions:

- that offer transparent descriptions of their programmes, including learning outcomes, credits, learning and teaching approaches and assessment methods;
- whose learning, teaching and assessment procedures can be accepted by the sending institution without requiring the student to take any additional work or examination;
- that are duly quality assured according to their respective national systems.

Agreements may not only be made with institutions offering similar programmes, but also with those providing programmes that are complementary.

Integration of credit mobility into programmes

Structuring credit mobility in the curricula facilitates recognition. Institutions can:

- identify the semester or year when a period of study abroad would best fit into the programme (mobility window);
- schedule in that semester/year the educational components with learning outcomes that can be easily achieved abroad (e.g. international or comparative courses, supplementary/elective courses, preparation of dissertation, language courses, work placements);
- identify partner institutions, where compatible/complementary learning outcomes could be achieved.

Nota Bene

In the Erasmus+ programme, several charters such as the Erasmus Charter for Higher Education (Institutional Commitment), the European Quality Charter for Mobility, the Erasmus Student Charter (European Code of Good Practice for Erasmus+ students) provide a framework for arranging credit mobility and recognition.

4.3. Grade distribution

Due to different cultural and academic traditions, European educational systems have developed not only different national grading scales but also different ways of using them within the same country, in different subject areas or institutions. While it is essential to acknowledge these differences, it is also important to make them transparent within the European Higher Education Area, so that grades awarded in all countries, subject areas or institutions can be properly understood and correctly compared.

Mobile students have the right to fair treatment and to transparency of their grades when credits are transferred from one institution to another, as access to further studies, grants or other benefits may depend on their level of performance. Transparency of performance levels is equally important for graduates applying for a job in their own or in another country.

To ensure transparent and coherent information on the performance of the individual student, each HEI should provide – in addition to their national/institutional grading scale and an explanation of the scale – a statistical distribution table of the passing grades awarded in the programme or field of study attended by the student (grade distribution table) showing how the grading scale is actually used in that programme. The grade distribution table was first introduced in the ECTS Users' Guide in 2009, as a replacement for the previous ECTS grading scales (A, B, C, D, E), which are not used anymore.

Even in cases when transferring the grades is not necessary in the local academic tradition of receiving institutions, calculating a grade distribution table will facilitate fair treatment of the incoming students on their return to the sending institution. It should be noted that it is also good practice to provide internal boards of examiners with detailed statistical data on examination grading in order to make the process more transparent and indicate any disparities which may indicate issues for further consideration.

Partners in joint degree programmes should agree in advance within their consortium how they will deal with grading and transfer of grades.

Grade distribution tables show how the existing national or institutional scale is being used in the institution – whether in open access or selective systems – and allow for comparison with the statistical distribution of grades in a parallel reference group of another institution. They represent the statistical distribution of positive grades (pass and above) awarded in each field of study in a specific institution. It is important to provide additional information on success rates at the same level of aggregation, but these should not be used for transfer.

Grade distribution tables have to be developed in a *standardised* format for reference groups of students enrolled in degree programmes belonging to the same field of studies. Such groups should be of reliable size in terms of number of students and number of years considered.

Calculating the grade distribution tables is a task that in many institutions will be undertaken at centralised level. The production of distribution tables should not cause undue difficulties in institutions as the required data are generally available in institutional information systems and the calculation of percentages is easily done with simple software. It only requires the following steps:

1. Identify the reference groups within your institution by using objective and transparent criteria which should be attached to the grade distribution tables produced. In the absence of methods based on comparable learning outcomes, it is recommended to use the ISCED-F classification which offers a standardised and hierarchical classification of fields of study. In order to have reference groups that are large enough for a statistically relevant comparison, it is recommended to use an ISCED code at the 'narrow' or 'detailed' levels (UNESCO Institute for Statistics, 2014).
2. Calculate the absolute number of passing grades awarded to each reference group identified in at least the last two years. Remember that information on success rates may be provided in general terms but not in this calculation.
3. Calculate the grade distribution in terms of percentages of the passing grades awarded to the reference group and develop cumulative percentages. As a result, there will be a grade distribution table with percentages and cumulative percentages for each reference group identified.

The following is an illustrative example of a grading table:

Grades used in institution (from highest to lowest passing grade)*	Number of passing grades awarded to the reference group	Percentage of each grade with respect to the total passing grades awarded	Cumulative percentage of passing grades awarded
10	50	5%	5%
9	100	10%	15%
8	350	35%	50%
7	300	30%	80%
6	200	20%	100%
Total:	1,000	100%	

* Grading systems/approaches may be established at national level.

When included in a student's Transcript of Records and Diploma Supplement, the table will facilitate the interpretation of each grade awarded and will not require any further calculation. The on-going European Grade Conversion System project (EGRACONS) is developing examples for the visual presentation of a grading table.

4.4 Grade conversion

When institutions decide to transfer their mobile students' grades, the academic responsible for credit transfer should compare the grade distribution table from his/her reference group with the one developed by the other institution for the parallel reference group. The position of each grade within the two tables can be compared and, on the basis of this comparison, individual grades are converted.

Typically, the percentage ranges of the grades overlap. The objective of the exercise is transparency. Therefore, the receiving institution should decide in advance whether they will take the minimum, average or maximum comparable grade of overlapping ranges.

Annex 2 includes examples of how grade conversion can be put into practice.

5 ECTS and lifelong learning



ECTS and lifelong learning

This section deals with the role of ECTS in facilitating lifelong learning, open learning opportunities and the recognition of prior learning and experience.

5.1 Lifelong learning – open learning opportunities

The higher education learning landscape is changing with the rapid development of more diversified and flexible learning opportunities – including blended learning, new forms of open online learning, Massive Open Online Courses (MOOCs), Open Educational Resources (OER), work-based learning, self-directed learning, individual learning pathways, continuing professional development (see chapter 3). A growing number of learners follow 'stand-alone' educational units or courses, without pursuing a specific qualification. Higher education institutions are faced with the need to satisfy a diversified student group and provide opportunities for individual learning pathways and different modes of learning. Consequently, many are diversifying and offering educational components with innovative modes of learning and teaching for all, through new technologies and Open Educational Resources.

The strength of ECTS is that it can be used in all these lifelong learning contexts, applying the same principles for credit allocation, award, accumulation and transfer. In the same way as credits are allocated to component parts of programmes, credits allocated for open learning and other modes of lifelong learning are based on the workload typically needed to achieve the defined learning outcomes.

Providers of all 'formally' (i.e. in the same way and meeting the same standards as conventional higher education institutions) quality assured higher education such as open learning are encouraged to use ECTS with the same transparent mechanisms as described in this Guide. This will greatly facilitate transition between different modes of learning, recognition and transfer, while increasing learner and stakeholder confidence in the outcomes of open learning.

Nota Bene

Continuing Professional Development (CPD) is increasingly recognised to be essential for those working in regulated professions. This is particularly true in the healthcare professions. CPD has a cross-border dimension which is increasingly significant. Whether voluntary or mandatory, it is perceived by professionals and providers alike as a mode of lifelong learning. It embraces formal, non-formal and informal learning. While elements of CPD may be converted into second cycle (Master) qualifications or into professional doctorates (depending on the national jurisdiction), CPD as a purely professional practice has a specific character: it may be self-managed and evaluated by peer-reviewed self-evaluation. Considerations of employability, continued right to practice, safeguarding standards of professional practice, protecting the public and, in the healthcare professions, patient safety nevertheless mean that its attainment must be measurable, verifiable and certified by a recognised/authorised authority.

How this is to be achieved remains a matter of debate within the CPD community. Both the European Credit System for Vocational Education and Training (ECVET) and ECTS are perceived to be relevant, since CPD may be located at any of the eight EQF levels. However, the interface between the two systems is not yet sufficiently permeable and the different professions have differing cultures and national sub-cultures. Discussion on relations between the European credit systems is on-going and it is hoped, will lead to greater clarity on the use of credits for CPD. Meanwhile CPD providers at levels five to eight of the EQF are encouraged to consider the appropriateness of ECTS credits for purposes of transparency, recognition, accumulation and transfer, using the methodology outlined in this Guide.

Credits awarded for all forms of higher education including continuing and professional education may be recognised and accumulated towards a qualification or not, depending on the desire of the student and/or the requirements for the award of the qualification. Some independent learners may only be interested in following an educational component without wishing to obtain a qualification, but the allocation and recording of credits may allow them to use these in the future if they wish.

Documenting all learning achievements and awarding an appropriate number of ECTS credits at the level of the learning makes it possible for this learning to be recognised in a transparent, authenticated way so that the credits may contribute to a future qualification. Validation and recognition instruments in formal education should adapt to the developing of more diversified, flexible education environment, acknowledging new forms of open learning made possible by technology. The correct use of ECTS will greatly improve and facilitate this process.

5.2 Recognition of prior learning and experience

Higher education institutions should be competent to award credits for learning outcomes acquired outside the formal learning context through work experience, voluntary work, student participation, independent study, provided that these learning outcomes satisfy the requirements of their qualifications or components. The recognition of the learning outcomes gained through non-formal and informal learning should be automatically followed by the award of the same number of ECTS credits attached to the corresponding part of the formal programme.

As with formal education, the award of credits is preceded by an assessment to verify the achievement of learning outcomes. The assessment methods and criteria should be constructed to measure the achievement of the required learning outcomes at the appropriate level, without reference to specific learning activities or workload. For example, 'participation in classroom discussion' of the subject matter would no longer be considered in assessment, whereas the corresponding learning outcome of 'constructing arguments while interacting with a group' would become relevant. Appropriate staff should be appointed in each department or subject area, who should have the formal authority and training to award credits for learning outcomes acquired outside the formal learning context on the basis of transparent criteria established and published by the Institution. It should be understood that they will be expected to report on, and document, their decisions through regular reports to an appropriate committee (e.g. at departmental, faculty or institutional level).

Nota Bene

There is a wide range of **assessment methods for recognising prior learning and experience**. One of the assessment tools is a portfolio method. Portfolios include documents that learners have collected in order to reveal individual skills acquired in various ways.

A portfolio takes into account a collection of materials that verify skills and knowledge acquired through previous experience in non-formal and informal learning. A portfolio includes references from employers and supervisors; it may include a performance appraisal, CV and other documents. By using a portfolio the assessor analyses a range of information that learners have provided. Learners may require help and advice when preparing their portfolios.

Institutions should develop recognition policies for non-formal or informal learning. These policies should include elements such as advice, feedback to learners on the results of the assessment and the possibility for learners to appeal. Institutions should also create facilities for advice, counselling and recognition of non-formal and informal learning. These may take different forms depending on national and institutional practices (e.g. they may exist within single higher education institutions or as joint centres for several institutions). Institutions' policies and practices should be published prominently on their websites.

Recognising non-formal and informal learning helps make HEIs more socially inclusive. Widening access opportunities for learners from professional life and a range of non-traditional learning environments helps make lifelong learning a reality. Institutions should be particularly open to the recognition of vocational education and training.

Nota Bene

The process of awarding credit to non-formal or informal learning has four main stages:

1. Initial advice and guidance (what does the process involve for the learner, the credit limits for non-formal/informal learning; what are the costs, roles and responsibilities of learner and tutor/advisor; and different learning pathways to a qualification).
2. Support (reflective process; understanding learning outcomes; identifying own learning outcomes; evidence gathering and selection).
3. Recognition/assessment (assessment of evidence of achievement of learning outcomes and assessment criteria).
4. Award of credit (credit awarded through this process is of same value as credit gained through formal learning).

Nota Bene

ECVET

The European Credit System for Vocational Education and Training (ECVET) was established through a Recommendation of the European Parliament and the Council in 2009 (2009/C 155/02).

ECVET is intended to facilitate the transfer, accumulation and recognition of assessed learning outcomes of individuals who are aiming to achieve a qualification in vocational education and training (VET).

Like ECTS, ECVET facilitates and supports students in shaping their own learning pathway through accumulation of credits – whether within a certain institution, from institution to institution, from country to country, and between different educational sub-systems and contexts of learning (i.e. formal, non-formal and informal learning), and helping them to build on their individual learning styles and experiences.

Like ECTS, ECVET is based on the notion of 60 credits, but the allocation of credits is a different one. Often ECVET is used to record and accumulate assessed learning outcomes, without a conversion in credit points. Therefore, instead of credit conversion, the recognition of learning from VET should be based on learning outcomes.

6 ECTS and quality assurance



ECTS and quality assurance

This section outlines how ECTS contributes to quality enhancement in HEIs and gives examples for the evaluation of ECTS implementation.

The primary responsibility for quality assurance lies with each institution, as agreed by Education Ministers of the countries involved in the Bologna Process (Berlin Communiqué, 2003). Internal quality assurance involves all procedures undertaken by higher education institutions to ensure that the quality of their programmes and qualifications meets their own specifications and those of other relevant bodies such as quality assurance agencies. External quality reviews undertaken by quality assurance agencies provide feedback to institutions and information to stakeholders. Quality assurance principles and processes apply to all modes of learning and teaching (formal, non-formal, informal, new modes of learning, teaching and assessment). *The European Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ENQA, 2005) support internal and external quality assurance.

Nota Bene

'The European Standards and Guidelines (ESG) are a set of standards and guidelines for internal and external quality assurance in higher education. The ESG are not standards for quality, nor do they prescribe how the quality assurance processes are implemented, but they provide guidance, covering the areas which are vital for successful quality provision and learning environments in higher education. The ESG should be considered in a broader context that also includes qualifications frameworks, ECTS and the Diploma Supplement that also contribute to promoting the transparency and mutual trust in higher education in the EHEA.'

Standards 1.2, 1.3, 1.4 and the associated guidelines refer to areas related to ECTS (in particular programme design, Student-Centred Learning, teaching and assessment and student admission, progression, recognition and certification).

Good practice in using ECTS will help institutions improve the quality of their programmes and their learning mobility offer. Thus, ECTS use should be quality assured through appropriate evaluation processes (e.g. monitoring, internal and external quality reviews and students' feedback) and continuous quality enhancement. In evaluating the effectiveness of a programme (including the learning outcomes, workload and assessment methods) a number of measures will be used. These may include high dropout or failure rates or longer completion times. A programme can be considered effective when its goals are attained in due time, that is to say when students achieve the defined learning outcomes, accumulate the required credits and obtain the qualification as planned in the programme. However, care should be taken in any analysis to discriminate critically between the elements, as they may also indicate ineffective planning or delivery of the programme or inadequate measures for supporting students.

The following indicators can be used for evaluating the quality of ECTS implementation:

- Educational components are expressed in terms of appropriate learning outcomes, and clear information is available concerning their level, credits, delivery and assessment;
- Studies can be completed in the time officially allocated to them (i.e. the workload associated with an academic year, a semester, trimester or a single course component is realistic);
- Annual monitoring examines any variations in patterns of achievement and results gained and follows up with appropriate revision;
- Students are provided with detailed information and advice so that they can follow progression rules, exploit options for flexible pathways and select educational components at an appropriate level for their qualification;
- Students are informed promptly of their results.

For mobile students and recognition, this means that:

- Credit transfer processes are included in the monitoring, review and validation procedures;
- Appropriate staff are designated as responsible for credit recognition and transfer matters;
- Learning Agreements are completed in all cases; their development, and any subsequent changes to them, are subject to sensitive yet robust approval processes;
- Incoming mobile students undertake educational components from the existing Course Catalogue; they are assessed and graded like local students;
- Detailed transcripts are provided recording the credits and grades awarded;
- Recognition is given to all credits associated with successfully completed educational components undertaken as part of an approved Learning Agreement in its final version; results are issued and transmitted promptly;
- Grading tables exist for interpreting the grades awarded, so that grades – and not just credits – are properly reflected in any final qualifications gained.

Student representatives should be actively engaged in quality assurance processes for ECTS:

- In internal quality assurance, where students provide information (by responding to surveys on a regular basis, focus groups); participate in the preparation of the institutions' self-assessment reports; are actively engaged in the bodies responsible for internal quality assurance processes and monitoring of the ECTS credit allocation.
- In external quality assurance, where students are members of external review panels of higher education institutions and/or programmes.

7 ECTS and supporting documents



ECTS and supporting documents

Use of ECTS is supported by documents based on the principles outlined in this Guide. This section suggests the elements to be included in these documents, as they represent a widely used and accepted way of communicating information which is useful for all students (including mobile and non-mobile students), academic and administrative staff, employers and other stakeholders.

To serve the needs of students, institutions should record their achievements in a transparent way which may be easily understood. Therefore, this Guide provides the information items that should be included in the main mobility documents, in order to foster better understanding between different institutions and countries, internal and external stakeholders.

7.1 Course Catalogue

The Course Catalogue includes detailed, user-friendly and up-to-date information on the institution's learning environment that should be available to students before entering and throughout their studies to enable them to make the right choices and use their time most efficiently. The information concerns, for example, the qualifications offered, the learning, teaching and assessment procedures, the level of programmes, the individual educational components and the learning resources. The Course Catalogue should include the names of people to contact, with information about how, when and where to contact them.

The Course Catalogue should be published on the institution's website, indicating the course/subject titles in the national language (or regional language, if relevant) and in English, so that all interested parties can easily access it. It should be published sufficiently in advance for prospective students to make their choices.

The institution is free to decide the format of the Catalogue, as well as the sequencing of the information. However, following a common structure as set out below makes Course Catalogues more easily comparable and improves transparency. In any case, the Course Catalogue should include general information on the institution, its resources and services, as well as academic information on its programmes and individual educational components.

Course Catalogue

Recommended elements for the Course Catalogue

General information:

- name and address
- description of the institution (including type and status)
- academic authorities
- academic calendar
- list of programmes offered
- admission requirements, including language policy, and registration procedures
- arrangements for the recognition of credit mobility and prior learning (formal, informal and non-formal)
- ECTS credit allocation policy (institutional credit framework)
- arrangements for academic guidance

Resources and services:

- student affairs office
- accommodation/housing
- meals
- cost of living
- financial support for students
- medical facilities
- insurance
- facilities for students with disabilities and special needs
- learning facilities
- international mobility possibilities
- practical information for incoming mobile students
- language courses
- work placement possibilities
- sports and leisure facilities
- student associations

Course Catalogue

Information on programmes:

- qualification awarded
- length of programme
- number of credits
- level of qualification according to the National Qualification Framework and the European Qualifications Framework
- field(s) of study (e.g. ISCED-F)
- specific admission requirements (if applicable)
- specific arrangements for recognition of prior learning (formal, non-formal and informal) (if applicable)
- qualification requirements and regulations, including graduation requirements (if applicable)
- profile of the programme (see chapter on programme design)
- programme learning outcomes
- programme structure diagram with credits (60 ECTS per full-time equivalent academic year)
- mode of study (full-time/part-time/e-learning etc.)
- examination regulations and grading scale
- obligatory or optional mobility windows (if applicable)
- work placement(s) (if applicable)
- work-based learning
- programme director or equivalent
- occupational profiles of graduates
- access to further studies

For joint programmes, *some additional elements are recommended*:

- information on the form of the diploma and Diploma Supplement (joint/double/multiple)
- members of consortium and their role
- mobility structure of the programme

Course Catalogue

Information on individual educational components:

- code
- title
- type (compulsory/optional)
- cycle (short/first/second/third)
- year of study when the component is delivered (if applicable)
- semester/trimester when the component is delivered
- number of ECTS credits allocated
- name of lecturer(s)
- learning outcomes
- mode of delivery (face-to-face/ distance learning etc.)
- prerequisites and co-requisites (if applicable)
- course content
- recommended or required reading and other learning resources/tools
- planned learning activities and teaching methods
- assessment methods and criteria
- language of instruction

7.2 ECTS and supporting documents for credit mobility

The Learning Agreement provides an official, binding commitment between the student, the sending institution, and the receiving institution/organisation/company on all the learning activities to be carried out.

The approval of the Learning Agreement and its amendments is possible through digital signatures or copies of scanned signatures, sent electronically, according to institutional regulations or practice.

7.2.1 Learning Agreement for credit mobility for studies

Credit Mobility

Recommended elements for the Learning Agreement for credit mobility for studies:

- name and contact details of the student
- names, addresses and academic and/or administrative contact persons of sending and receiving institutions
- student's field of study at sending institution (ISCED-F codes)
- study cycle (short/first/second/third cycle)
- period of study (from/to) at the receiving institution
- study programme abroad: link to the Course Catalogue at the receiving institution and list of educational components to be taken (with codes and ECTS credits)
- educational components from which the student will be exempted at the sending institution if the components taken abroad are successfully completed or stipulating that the mobility period as a whole will be recognised (for example, this will be the case of mobility windows and degrees which integrate a compulsory period abroad)
- signatures of the three parties (the student, representatives of sending and receiving institutions)

7.2.2 Learning Agreement for work placements

The Learning Agreement is also essential for work placements, as a binding document outlining the learning activities to be carried out by the student within this educational component.

The commitment of the receiving organisation is to provide quality work placement, relevant to the student's learning path, with clearly defined learning outcomes, and to issue a Work Placement Certificate upon completion of the work placement.

The commitment of the sending institution is to ensure the quality and relevance of the work placement, monitor the student's progress, and to grant recognition of the ECTS credits for the successfully completed learning outcomes.

The Learning Agreement for work placements should be signed by the three parties: the student, the sending institution and the receiving organisation/company.

Work Placements

Recommended elements for the Learning Agreement for work placements:

- name and contact details of the student
- names, addresses and contact persons of sending institution and receiving organisation/ company/etc.
- student's field of study at sending institution (ISCED-F codes)
- study cycle (short/first/second/ third cycle)
- type of organisation/company (private/public/etc.)
- period of training (from/to) at the receiving institution and ECTS credits
- learning outcomes to be acquired by the trainee at the end of the traineeship
- detailed programme of the traineeship period, including tasks/deliverables
- number of working hours per week
- level of competence in the workplace language that the student has or agrees to acquire by the start of the study period (if applicable)
- monitoring arrangements and evaluation plan
- provisions for changes for the Learning Agreement for work placements
- recognition arrangements in the sending institution
- signatures of the three parties (the student, representative of the sending institution, and receiving organisation/ company – including the supervisor of the trainee)

7.3 Transcript of Records

The Transcript of Records provides an up-to-date record of students' progress in their studies: the educational components they have taken, the number of ECTS credits they have achieved, and the grades they have been awarded.

Since the Transcript is a vital document for recording progress and for recognising learning achievements, it is crucial to determine who is responsible for producing it, how it is issued, and how it is delivered. Most institutions produce the Transcript of Records from their institutional databases. It is important to keep it in mind that the Transcript may be used in other contexts, thus information should be provided in a transparent, complete and clear way.

In case of credit mobility, the receiving institution provides a Transcript of Records to all mobile students and sends it to the sending institution and the student at the end of their period of study, in order to certify formally the work completed, the credits awarded, and the local grades received during the mobility period. This should be sent within a reasonably short period of time after proclamation of the student's results at the receiving institution (see chapter on credit mobility and recognition).

Transcript of Records

Recommended elements for the Transcript of Records:

- name of the student
- ID and/or contact details of the student (if applicable)
- names and contacts of the institution
- field of study of the student and/or name of the programme
- current year of study
- educational components taken at the institution (with codes, credits and local grades)
- description of the institutional grading system
- grade distribution information for the reference group identified
- date of issue and signature of the responsible person

The sending institution should provide the student with their Transcript of Records (or equivalent document/database), without further requirements from him or her in a reasonable period of time. This ensures clarity about the recognition outcomes of the mobility period abroad.

In mobility for studies, it is recommended to include the components that have been replaced in the student's home degree, the number of credits that they represent and, when applicable, the translation of the grades received by the student abroad.

When the mobility period is recognised as a whole rather than component by component, the sending institution should just record the number of credits, local grades (where applicable) and learning outcomes defined for the whole mobility period.

In the case of traineeships, the Transcript of Records of the sending institution will contain at least the information necessary to fulfil all the recognition arrangements agreed in the Learning Agreement before the mobility. This may include granting a concrete number of credits, a grade, etc.

7.4 Work Placement Certificate

The Work Placement Certificate aims to provide transparency and bring out the value of the experience of the student's work placement. This document is issued by the receiving organisation/enterprise upon the trainee's completion of the work placement, and it can be complemented by other documents, such as letters of recommendation.

Work Placement Certificate

Recommended elements for the Work Placement Certificate:

- name of the student
- name of the organisation/ enterprise
- contact details of the organisation/enterprise [street, city, country, phone, e-mail address, website]
- type of organisation/enterprise (private/public/third sector/...)
- start and end of the work placement
- detailed programme of the work placement, listing the tasks
- knowledge, skills (intellectual and practical) and competences acquired (learning outcomes achieved)
- evaluation of the student's performance
- date of issue, name and signature of the responsible person at the receiving organisation/enterprise

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Annex 1 Glossary



Glossary

A

Accumulation of credits

The process of collecting credits awarded for achieving the learning outcomes of educational components in formal contexts and for other learning activities carried out in informal and non-formal contexts. A student can accumulate credits in order to obtain qualifications, as required by the degree-awarding institution, or to document personal achievements for lifelong learning purposes.

Allocation of credits

The process of assigning a number of credits to qualifications, degree programmes or single educational components. Credits are allocated to entire qualifications or programmes according to national legislation or practice, where appropriate, and with reference to national and/or European qualifications frameworks. They are allocated to educational components, such as course units, dissertations, work-based learning and work placements, taking as a basis the allocation of 60 credits per full-time academic year, according to the estimated workload required to achieve the defined learning outcomes for each component.

Assessment methods

The whole range of written, oral and practical tests/examinations, projects, performances, presentations and portfolios that are used to evaluate the learner's progress and ascertain the achievement of the learning outcomes of an educational component (unit/module).

Assessment criteria

Descriptions of what the learner is expected to do and at what level, in order to demonstrate the achievement of a learning outcome.

The assessment methods and criteria for an educational component have to be appropriate and consistent with the learning outcomes that have been defined for it and with the learning activities that have taken place.

Award of credits

The act of formally granting students and other learners the credits that are assigned to the qualification and/or its components if they achieve the defined learning outcomes. National authorities should indicate which institutions have the right to award ECTS credits. Credits are awarded to individual students after they have completed the required learning activities and achieved the defined learning outcomes, as evidenced by appropriate assessment. If students and other learners have achieved learning outcomes in other formal, non-formal, or informal learning contexts or timeframes, credits may be awarded through assessment and recognition of these learning outcomes.

C

Competence

The European Qualifications Framework (EQF) defines competence as the ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of the EQF competence is described in terms of responsibility and autonomy.

Fostering competences is the object of all educational programmes. Competences are developed in all course units and assessed at different stages of a programme. Some competences are subject-area related (specific to a field of study), others are generic (common to any degree course). It is normally the case that competence development proceeds in an integrated and cyclical manner throughout a programme.

Continuing Professional Development (CPD)

An aspect of lifelong learning, sometimes referred to as Continuing Professional Education, CPD describes the skills, knowledge and experience that an individual gains formally and informally in his work and which builds on his basic qualifications and training. Increasingly in professional and vocational careers there is a formal requirement to continue to learn and develop knowledge, skills and competences throughout careers to keep up to date and be able to work safely, legally and effectively. Formal CPD which is a professional requirement is validated and documented. Increasingly employers expect to have a formal authenticated record of an individual's CPD and it consequently has become an important element in the curriculum.

Course Catalogue

The Course Catalogue includes detailed, user-friendly and up-to-date information on the institution's learning environment (general information on the institution, its resources and services, as well as academic information on its programmes and individual educational components) that should be available to students before entering and throughout their studies to enable them to make the right choices and use their time most efficiently.

The Course Catalogue should be published on the institution's website, indicating the course/subject titles in the national language (or regional language, if relevant) and in English, so that all interested parties can easily access it. The institution is free to decide the format of the Catalogue, as well as the sequencing of the information. It should be published sufficiently in advance for prospective students to make their choices.

Course unit

A self-contained, formally structured learning experience. It should have a coherent and explicit set of learning outcomes, defined learning activities consistent with the time allocated within the curriculum, and appropriate assessment criteria.

Credit (ECTS)

ECTS credits express the volume of learning based on the defined learning outcomes and their associated workload. 60 ECTS credits are allocated to the learning outcomes and associated workload of a full-time academic year or its equivalent, which normally comprises a number of educational components to which credits (on the basis of the learning outcomes and workload) are allocated. ECTS credits are generally expressed in whole numbers.

Credit mobility

The mobility of an exchange student, who stays at a host institution for a period, during which s/he can carry out activities awarding academic credits, which are then recognised by the home institution.

Credit transfer

A process that allows credit awarded by one higher education awarding body to be recognised and count towards the requirements of a programme at another institution; or that allows credit gained on a particular programme to contribute towards the requirements of a different one.

Cycle

One of the objectives in the Bologna Declaration in 1999 was the 'adoption of a system based on two main cycles, undergraduate and graduate.' In 2003 doctoral studies were included in the Bologna structure and referred to as the third cycle. The EHEA has thus defined a hierarchy of three Higher Education cycles (first cycle, second cycle and third cycle). All higher education qualifications in the European Higher Education Area are located within these three cycles.

Cycle (Level) Descriptors

Generic statements about the expected outcomes for each of the three cycles. A good example of general cycle (level) descriptors are the so-called Dublin Descriptors, which have served as one of the foundations (along with ECTS) for the Framework for Qualifications of the European Higher Education Area.

D

Degree mobility

Learning mobility for degree purposes, even if only part of the programme is undertaken abroad, e.g. in a jointly delivered or jointly awarded degree programme (Mapping University Mobility Project, 2015).

Degree programme

The set of educational components leading to the award of a degree to a student after successful completion of all the requirements.

Diploma Supplement

The Diploma Supplement (DS) is a document accompanying a higher education diploma, providing a standardised description of the nature, level, context, content and status of the studies completed by its holder. It is produced by the higher education institutions according to standards agreed by the European Commission, the Council of Europe and UNESCO. The Diploma Supplement is also part of the Europass framework transparency tools.

It has the following eight sections of information:

- the holder of the qualification
- the qualification
- its level and function
- the contents and results gained
- certification of the supplement
- details of the national higher education system concerned (provided by the National Academic Recognition Information Centres (NARICs))
- any additional relevant information

Graduates in all the countries taking part in the Bologna Process have the right to receive the Diploma Supplement automatically, free and in a major European language.

Dublin Descriptors

The Dublin Descriptors are the cycle descriptors (or 'level descriptors') presented in 2003 and adopted in 2005 as the Qualifications Framework of the European Higher Education Area. They offer generic statements of typical expectations of achievements and abilities associated with awards that represent the end of each of a (Bologna) cycle or level. The descriptors are phrased in terms of competence levels, not learning outcomes, and they enable to distinguish in a broad and general manner between the different cycles. A level descriptor includes the following five components:

- knowledge and understanding
- applying knowledge and understanding
- making judgements
- communication
- lifelong learning skills



Erasmus+

EU programme for Education, Training, Youth and Sport for 2014-2020 (Regulation (EU) No 1288/2013).

European Credit Transfer and Accumulation System (ECTS)

A learner-centred system for credit accumulation and transfer, based on the principle of transparency of learning, teaching and assessment processes. Its objective is to facilitate planning, delivery and evaluation of study programmes and student mobility by recognising learning achievements and qualifications and periods of learning.

European Credit System for Vocational Education and Training (ECVET)

The ECVET system aims at allowing the transfer, recognition and accumulation of learning outcomes to obtain a qualification. It is a decentralised system relying on volunteer participation of Member States and stakeholders of vocational training, respecting national legislations and regulations. It gives a methodological framework for describing qualifications in terms of learning outcomes using units, allowing the allocation of transferable points for Member States with different education and qualification frameworks. ECVET is founded on partner agreements regarding qualification transparency and mutual stakeholder trust (ECVET, 2010).

Educational component

A self-contained and formally structured learning experience (such as: course unit, module, work placement).

Europass Mobility

Europass is a set of five documents (Curriculum Vitae, Language Passport, Europass Mobility, Certificate Supplement, Diploma Supplement) which aim to make skills and qualifications clearly and easily understood in Europe. Europass Mobility is a document to record knowledge and skills acquired in another European country, completed by the institutions involved in the mobility of the individual (sending and receiving institution).

European Higher Education Area (EHEA)

The European Higher Education Area (EHEA) was launched at the Bologna Process' decade anniversary, in March 2010, during the Budapest-Vienna Ministerial Conference. Building on the main objective of the Bologna Process since its inception in 1999, the EHEA is meant to ensure more comparable, compatible, coherent and attractive systems of higher education in Europe.

European Qualifications Framework for Lifelong Learning (EQF)

The European Qualifications Framework for Lifelong Learning is a common European reference framework which enables countries of the European Union to link their qualifications systems to one another. It was adopted by the European Parliament and Council on 23 April 2008. The EQF uses eight reference levels based on learning outcomes that are defined in terms of knowledge, skills and competence. It shifts the focus from input (lengths of a learning experience, type of institution) to what a person holding a particular qualification actually knows and is able to do. It makes qualifications more readable and understandable across different countries and systems in the European Union.

F

Flexibility

Refers to measures through which the provision of higher education is made more flexible. The idea behind this concept is to open up higher education to more people and to increase adaptability to the multiple life worlds in modern societies. It also relates to flexibility in programme/curriculum design and approaches to learning and teaching.

Formal learning

Learning typically provided by an education or training institution, structured (in terms of learning objectives, learning time or learning support) and leading to certification. Formal learning is intentional from the learner's perspective.

Framework for Qualifications of the European Higher Education Area (QF-EHEA)

In the European Higher Education Area, qualifications frameworks are found at two levels. An overarching framework (QF-EHEA) has been adopted in 2005 and all member countries committed themselves to develop national qualifications frameworks that are compatible with this overarching framework.

A national qualifications framework for higher education encompasses all the qualifications in a higher education system. It shows the expected learning outcomes for a given qualification and how learners can move between qualifications.

The aim of QF-EHEA is to organise national higher education qualifications into an overarching European-wide qualifications framework. Within this framework, qualifications are defined according to levels of complexity and difficulty (Bachelor, Master, Doctor).

The QF-EHEA identifies four main cycles which are described by the 'Dublin Descriptors'. They offer generic statements of typical expectations of achievements and abilities associated with awards that represent the end of each of a cycle. The short, first and second cycles are also characterised by credit ranges.

Free mover

A student participating in credit mobility outside an organised student mobility programme (for example Erasmus+). A free mover chooses a host institution and organises his/her credit mobility at that institution.

G

Grade distribution table

Grade distribution tables show how the existing national or institutional scale is being used in the institution – whether in open access or selective systems – and allow for comparison with the statistical distribution of grades in a parallel reference group of another institution. They represent the statistical distribution of positive grades (pass and above) awarded in each field of study in a specific institution.

I

Informal learning

Learning resulting from daily activities related to work, family or leisure which is not organised or structured in terms of objectives, time or learning support; it may be unintentional from the learner's perspective; examples of learning outcomes acquired through informal learning are: skills acquired through life and work experiences, project management skills, ICT skills acquired at work, languages learned, intercultural skills acquired during a stay in another country, ICT skills acquired outside work, skills acquired through volunteering, cultural activities, sports, youth work and through activities at home e.g. taking care of a child (Council Recommendation 2012/C 398/01).

J

Joint degree

A single document which is awarded by higher education institutions offering the joint programme, and nationally acknowledged as the recognised award of the joint programme (EQAR, 2015).

Joint programme

An integrated curriculum coordinated and offered jointly by different higher education institutions and leading to double/multiple degrees or a joint degree (Ibid.).

L

Learner

An individual engaged in a learning process (formal, non-formal or informal learning). Students are learners involved in a formal learning process.

Learning Agreement

A formalised agreement of the three parties involved in mobility – the student, the sending institution and the receiving institution or organisation/enterprise – to facilitate the organisation of credit mobility and its recognition. The agreement is to be signed by the three parties before the start of the mobility period and it is intended to give the student the confirmation that the credits he/she successfully achieves during the mobility period will be recognised.

Learning mobility

Learning mobility is normally understood to involve physical mobility in which the learner/student moves to an institution in another country for part or all of a programme of study. The majority of such mobility takes place in the context of planned and organised programmes. The credits from such mobility are formally recognised by the sending institution.

There is also a considerable amount of 'free mover' mobility which depends on individual initiative.

As well as physical mobility it is increasingly possible for learners to participate in virtual mobility. This too may be through organised joint or shared curriculum, or through Open Universities, Open Education Resources, MOOCs, or other on-line material.

Learning outcome

Statements of what a learner knows, understands and is able to do on completion of a learning process. The achievement of learning outcomes has to be assessed through procedures based on clear and transparent criteria. Learning outcomes are attributed to individual educational components and to programmes at a whole. They are also used in European and national qualifications frameworks to describe the level of the individual qualification.

Learning pathway

Learning pathway is a route taken by a learner allowing him/her to build knowledge progressively and acquire the desired set of competences. The learning pathway may be 'signposted' through institution guidance and regulations (including the recognition of prior learning and experience) and different learning pathways may lead to the award of the same qualification. In essence the concept of a 'learning pathway' emphasises the choice of the student in reaching the desired educational goals.

Level descriptors

See under 'Cycle (Level) Descriptors' and 'Dublin Descriptors'.

Lifelong learning

All learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment-related perspective (Communication (2001) 678).

Programmes and services contributing to lifelong learning within the higher education sector may include mainstream programmes, continuing education, evening classes, specific programmes for part-time learners, access to libraries/higher education institution resources, distance learning, training courses, targeted guidance and counselling services among other actions and initiatives.

M

Massive Open Online Courses (MOOCs)

Courses which allow open entry, are free to sign up for, and are delivered online usually with peer or automated support. They often have large enrolment numbers.

Mobility window

A mobility window is a period of time reserved for international student mobility that is embedded into the curriculum of a study programme (Ferencz et al., 2013).

Module

A course unit in a system in which each course unit carries the same number of credits or a multiple of it.

N

National Qualifications Framework (NQF)

An instrument for the classification of qualifications according to a set of criteria for specified levels of learning achieved, which aims to integrate and coordinate national qualifications subsystems and improve the transparency, access, progression and quality of qualifications in relation to the labour market and civil society (Council Recommendation 2012/C 398/01).

National qualifications frameworks encompass all education qualifications – or all higher education qualifications, depending on the policy of the country concerned – in an education system. They show what learners may be expected to know, understand and be able to do on the basis of a given qualification (learning outcomes) as well as how qualifications within a system articulate, that is how learners may move between qualifications in an education system.

National qualifications frameworks are developed by the competent public authorities in the country concerned, in cooperation with a broad range of stakeholders – including higher education institutions, students, staff and employers.

Non-formal learning

Learning which takes place through planned activities (in terms of learning objectives, learning time) where some form of learning support is present (e.g. learner-teacher relationships); it may cover programmes to impart work skills, adult literacy and basic education for early school leavers; very common cases of non-formal learning include in-company training, through which companies update and improve the skills of their workers such as ICT skills, structured on-line learning (e.g. by making use of open educational resources), and courses organised by civil society organisations for their members, their target group or the general public (Ibid.).

O

Open Educational Resources (OER)

Digitised materials offered freely and openly for educators, students and self- learners to use and reuse for teaching, learning and research; it includes learning content, software tools to develop, use and distribute content, and implementation resources such as open licenses; OER also refers to accumulated digital assets that can be adjusted and which provide benefits without restricting the possibilities for others to enjoy them (Ibid.).

P

Programme (educational)

A set of educational components – based on learning outcomes – that are recognised for the award of a qualification.

Progression

The process which enables learners to pass from one stage of a qualification to the next and to access educational programmes that prepare for qualifications at a higher level than those he/she already possesses.

Progression rules

Set of rules that define conditions for learners' progression within qualifications and towards other qualifications.

Q

Qualification

Any degree, diploma or other certificate issued by a competent authority attesting the successful completion of a recognised programme of study.

Quality assurance

The process or set of processes adopted nationally and institutionally to ensure the quality of educational programmes and qualifications awarded.

Quality assurance should ensure a learning environment in which the content of programmes, learning opportunities and facilities are fit for purpose. Quality assurance is often referred to in the context of a continuous improvement cycle (i.e. assurance and enhancement activities).

R

Recognition (academic recognition)

Approval of courses, qualifications, or diplomas from one (domestic or foreign) higher education institution by another for the purpose of admitting students to undertake further studies.

Academic recognition can also be sought for an academic career at a second institution and in some cases for access to other employment activities on the labour market (academic recognition for professional purposes). As regards the European Higher Education Area, three main levels of recognition can be considered, as well as the instruments attached to them (as suggested by the Lisbon Convention and the Bologna Declaration):

i. recognition of qualifications, including prior learning and professional experience, allowing entry or re-entry into higher education;

ii. recognition of short study periods in relation to student mobility, having as the main instrument the ECTS (European Credit Transfer System);

iii. recognition of full degrees, having as the main instrument the Diploma Supplement (Vlăsceanu et al., 2004).

Recognition of credits

The process through which an institution certifies that learning outcomes achieved and assessed in another institution satisfy (some or all) requirements of a particular programme, its component or qualification.

Recognition of non-formal and informal learning

The process through which an institution certifies that the learning outcomes achieved and assessed in another context (non-formal or informal learning) satisfy (some or all) requirements of a particular programme, its component or qualification.

Recognition of prior learning and experience

The validation of learning outcomes, whether from formal education or non-formal or informal learning, acquired before requesting validation (Council Recommendation 2012/C 398/01).

Recognition of professional qualifications

Directive 2005/36/EC establishes rules for EU Member States on access to or pursuit of a regulated profession upon possession of specific professional qualifications. The Directive stipulates that the host Member State shall recognise professional qualifications obtained in another Member State – which allow the holder of the said qualifications to pursue the same profession there – for access to and pursuit of that profession.

The recognition of professional qualifications by the host Member State allows beneficiaries to gain access in that Member State to the same profession as that for which they are qualified in the home Member State and to pursue it in the host Member State under the same conditions as its nationals (Directive 2005/36/EC).

S

Student

A learner enrolled on a formal educational programme at a higher education institution. Please note: The question of whether to refer to 'students' or 'learners' in this Guide was discussed in depth in the working group and with stakeholders. Due to the general shift towards more flexible learning provision it was agreed that the term 'learner' is preferable in most contexts. However, it was recognised that since most higher education systems are still organised around provision of formal programmes to a clearly defined student body, the term 'student' would be used to encompass all learners in higher education institutions (whether full-time or part-time, engaged in distance, on-campus or work-based learning, pursuing a qualification or following stand-alone educational units or courses).

Student-Centred Learning

A learning approach characterised by innovative methods of teaching which aim to promote learning in communication with teachers and students and which takes students seriously as active participants in their own learning, fostering transferable skills such as problem-solving, critical and reflective thinking (ESU, 2010).

T

Transcript of Records

An up-to-date record of the students' progress in their studies: the educational components they have taken, the number of ECTS credits they have achieved, and the grades they have been awarded. It is a vital document for recording progress and for recognising learning achievements, including for student mobility. Most institutions produce the Transcript of Records from their institutional databases.

Transfer (of credits)

The process of having credits awarded in one context (programme, institution) recognised in another formal context for the purpose of obtaining a qualification. Credits awarded to students in one programme may be transferred from an institution to be accumulated in another programme, offered by the same or another institution. Credit transfer is the key to successful study mobility. Institutions, faculties, departments may make agreements which guarantee automatic recognition and transfer of credits.

V

Validation

A process of confirmation by an authorised body that an individual has acquired learning outcomes measured against a relevant standard and consists of the following four distinct phases:

1. **Identification** through dialogue of particular experiences of an individual;
2. **Documentation** to make visible the individual's experiences;
3. Formal **Assessment** of these experiences; and
4. **Certification** of the results of the assessment which may lead to a partial or full qualification (Council Recommendation 2012/C 398/01).

Virtual mobility

Cross-border e-learning (i.e. when a student follows distance learning courses offered by a higher education institution abroad). Virtual mobility can be useful in promoting and complementing physical mobility. Virtual mobility can play an important role in the internationalisation strategy of an institution (Mapping University Mobility Project, 2015).

W

Work-based learning

Learning delivered by a university, college or other training provider in the workplace, normally under the supervision of a person from the same company as well as a professional teacher from outside the company (Scottish Funding Council, 2015).

Workload

An estimation of the time learners typically need to complete all learning activities such as lectures, seminars, projects, practical work, work placements, individual study required to achieve the defined learning outcomes in formal learning environments. The correspondence of the full-time workload of an academic year to 60 credits is often formalised by national legal provisions. In most cases, student workload ranges from 1,500 to 1,800 hours for an academic year, which means that one credit corresponds to 25 to 30 hours of work. It should be recognised that this represents the normal workload and that for individual learners the actual time to achieve the learning outcomes will vary.

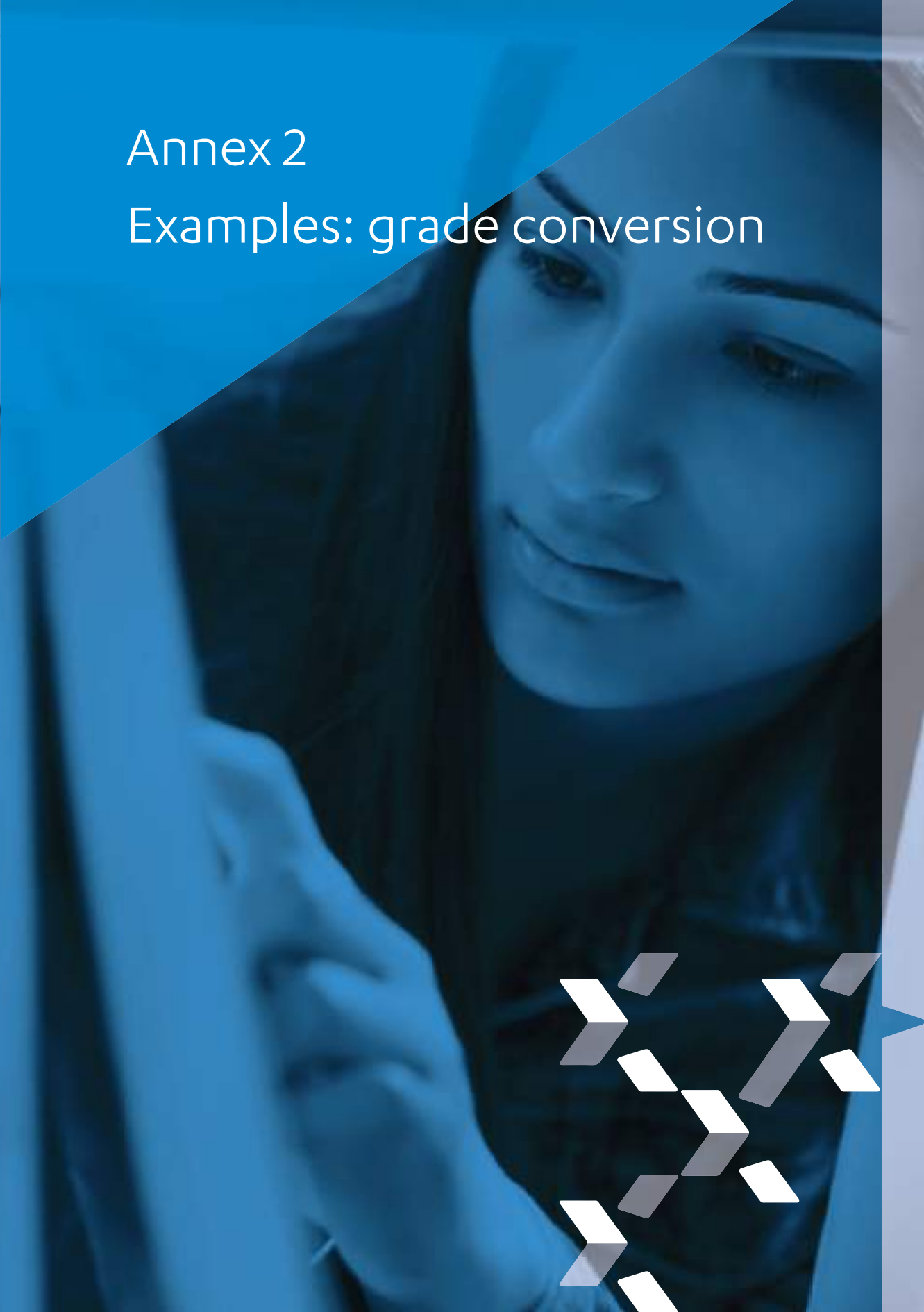
Work placement

A planned period of experience outside the institution (for example, in a workplace) to help students to develop particular skills, knowledge or understanding as part of their programme.

Work Placement Certificate

A document is issued by the receiving organisation/enterprise upon the trainee's completion of the work placement, and it can be complemented by other documents, such as letters of recommendation. It aims to provide transparency and bring out the value of the experience of the student's work placement.

Annex 2
Examples: grade conversion

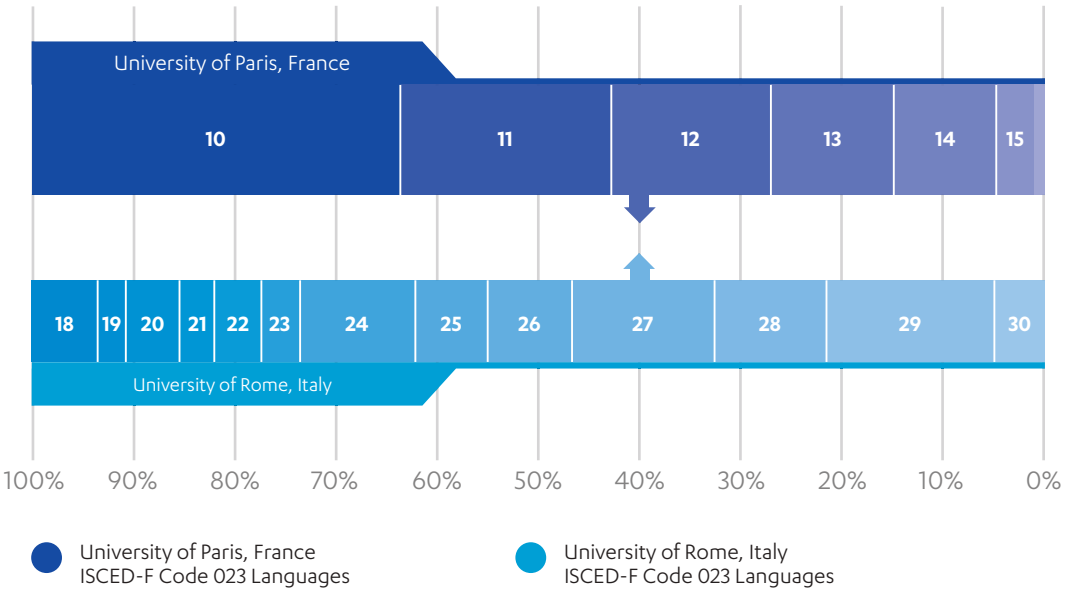


Examples for grade conversion[5]:

1 Grade conversion based on two grade distribution tables from two reference groups belonging to different national grading systems:

Reference group A in Italy (*Passing grades ranging from 18 to 30 cum laude*)
Reference group/Field of study: ISCED Code 023 Languages

Reference group B in France (*Passing grades ranging from 10 to 20*)
Reference group/Field of study: ISCED Code 023 Languages



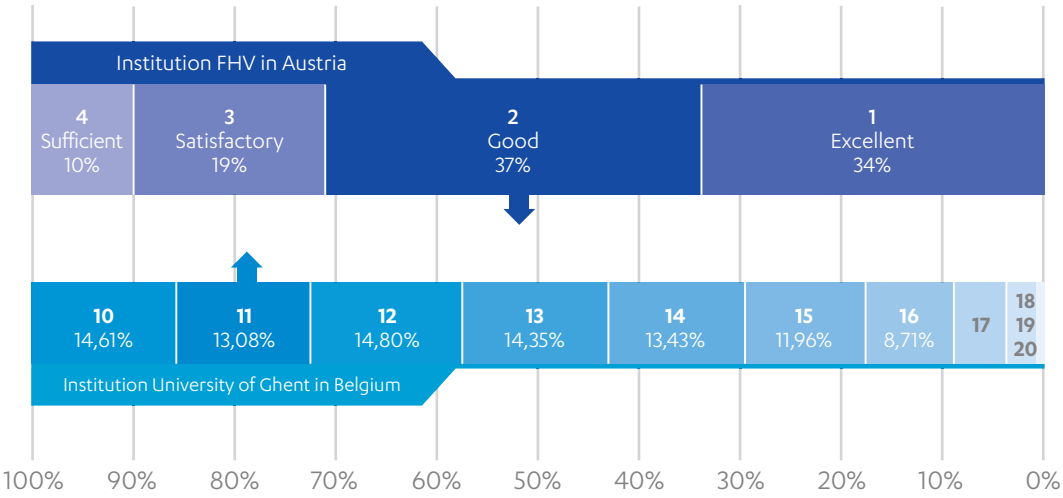
In this case, the percentage ranges of the grades overlap. The receiving institution should have decided in advance whether they will take the minimum, average or maximum comparable grade of overlapping ranges. Therefore, if the University of Rome had decided in advance that they would use the minimum or the average, the student's grade would be 27 and if they had decided that they would use the maximum, the student's grade would be 28.

[5] Please refer to the ECTS Guide website for further examples added.

2 Grade conversion based on two grade distribution tables from two reference groups belonging to different national grading systems:

Institution FHV in Austria[6] (*Passing grades ranging from 1 to 4*)
Reference group/Field of study: ISCED Code 071 Engineering and engineering trades

Institution University of Ghent in Belgium (*Passing grades ranging from 10 to 20*)
Reference group/Field of study: ISCED Code 071 Engineering and engineering trades



Institution FHV in Austria
ISCED-F Code 071 Engineering and engineering trades

Institution University of Ghent in Belgium
ISCED-F Code 071 Engineering and engineering trades

17	5,15%	19	1,10%
18	2,55%	20	0,26%

In this example a grade 2 (Good) from the institution in Austria would be transferred into a grade 13 in the institution in Belgium. A grade 11 from the institution in Belgium would be transferred into a grade 3 (Satisfactory) in Austria. In this case both institutions have decided to use the average in case of overlapping percentage ranges.

[6] University of Applied Sciences Vorarlberg (Fachhochschule Vorarlberg - FHV)

Annex 3
Recommended reading list



Recommended reading list



The Bologna Process, related documents

A Framework for Qualifications for the European Higher Education Area; Bologna Working Group on Qualifications Frameworks, published by the Ministry of Science, Technology and Innovation, Copenhagen, February 2005: http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/050218_QF_EHEA.pdf

Bologna Conference, Using Learning Outcomes, Edinburgh, 1-2 July 2004: http://www.ehea.info/article-details.aspx?ArticleId=119

Bologna Framework and Certification (2008): http://www.ehea.info/Uploads/QF/Bologna_Framework_and_Certification_revised_29_02_08.pdf

Berlin Communiqué (Realising the European Higher Education Area. Communiqué of the Conference of Ministers responsible for Higher Education in Berlin on 19 September 2003): http://www.ehea.info/Uploads/about/Berlin_Communique1.pdf

Bucharest Communiqué (Making the Most of Our Potential: Consolidating the European Higher Education Area, Communiqué of the Conference of Ministers responsible for Higher Education in Bucharest on 26-27 April 2012): http://www.ehea.info/Uploads/(1)/Bucharest%20Communique%202012(1).pdf

European Standards and Guidelines for Quality Assurance in the European Higher Education Area: http://www.ehea.info/news-details.aspx?ArticleId=355

European Approach for Quality Assurance of Joint Programmes: https://eqar.eu/projects/joint-programmes.html

Report by the Structural Reforms Working Group to the BFUG, Structural Reforms Working Group, Strasbourg, Brussels, Vatican City, Warsaw, 8 December 2014: http://www.ehea.info/Uploads/SubmitedFiles/12_2014/154923.pdf



Official documents of the European Union

Council Recommendation (2012/C 398/01) of 20 December 2012 on the validation of non-formal and informal learning: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2012:398:0001:0005:EN:PDF

Communication from the Commission (COM 2001 678) of 21 November 2001: Making a European Area of Lifelong Learning a Reality: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0678:FIN:EN:PDF

Directive of the European Parliament and of the Council (2005/36/EC) of 7 September 2005 on the recognition of professional qualifications: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02005L0036-20140117&from=EN

Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008H0506(01)&from=EN

Regulation of the European Parliament and of the Council (EU No 1288/2013) of 11 December 2013 establishing 'Erasmus+': the Union programme for education, training, youth and sport: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:347:0050:0073:EN:PDF



Websites and useful links

ENIC-NARIC Network: http://www.enic-naric.net/

European University Association (EUA) occasional papers on Massive Open Online Courses (MOOCs): http://www.eua.be/Libraries/Publication/MOOCs_Update_January_2014.sflb.ashx

Get to know ECVET better: Questions and Answers, Brussels, (2011): http://www.ecvet-team.eu/en/system/files/documents/14/questions-answers-about-ecvet-21/04/2010.pdf

Scottish Funding Council Glossary: http://www.sfc.ac.uk/housekeeping/glossary/glossary.aspx

The European Credit system for Vocational Education and Training (ECVET): http://ec.europa.eu/education/policy/vocational-policy/ecvet_en.htm

UNESCO (2014), ISCED: International Standard Classification of Education: http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.aspx

Literature

Bergan, S. (2007), Qualifications – Introduction to a concept (Council of Europe higher education series No.6): https://book.coe.int/eur/en/higher-education-and-research/3794-qualifications-introduction-to-a-concept-council-of-europe-higher-education-series-no6.html

Bergan, S.; Rauhvargers, A. (eds.) (2005), Standards for recognition: the Lisbon recognition convention and its subsidiary texts (Council of Europe higher education series No. 3): http://www.coe.int/t/dg4/highereducation/resources/heseries_en.asp

Biggs, J. (2003), Aligning teaching for constructing learning. Higher Education Academy: https://www.heacademy.ac.uk/aligning-teaching-constructing-learning

Bingham (1999), Guide to Developing Learning Outcomes

Cedefop (2009), European guidelines for Validating Non-formal and Informal learning; Luxembourg: http://www.cedefop.europa.eu/EN/Files/4054_en.pdf

Cedefop (2011), Using learning outcomes: European Qualifications Framework Series: Note 4: http://www.cedefop.europa.eu/EN/Files/Using_learning_outcomes.pdf

Colucci, E.; Davies, H.; Korhonen, J.; Gaebel, M. (2012): Mobility: Closing the gap between policy and practice; European University Association, Brussels: http://www.maunimo.be/images/Oslo/eua%20maunimo_web.pdf

Euridyce (2012), Recognition of Prior Non-Formal and Informal Learning in Higher Education. Overview: http://eacea.ec.europa.eu/education/eurydice/documents/focus-on/152.pdf

Ferencz, I.; Hauschildt, K.; Garam, (eds.) (2013), Mobility Windows: From Concept to Practice, Bonn: Lemmens Medien GmbH (ACA Papers on International Cooperation in Education): http://www.aca-secretariat.be/fileadmin/aca_docs/images/members/ACA_2013_Mobility_windows.pdf

Gosling, D. and Moon, J. (2002), How to use learning outcomes and assessment criteria (Third Edition) London: (SEEC): http://www.aec-music.eu/userfiles/File/goslingmoon-learningoutcomesassessmentcriteria(2).pdf

Hunt, E. S.; Bergan, S. (eds.) (2010), Developing attitudes to recognition. Substantial differences in an age of globalisation (Strasbourg: Council of Europe Publishing. Council of Europe Higher Education Series No 13)

Lockhoff, J., Wegejis, B., Durkin, K., Wagenaar, R., González, J., Dalla Rosa, L., & Gobbi, M. (2011). *A guide to formulating degree programme profiles. Including programme competences and programme learning outcomes. University of Deusto:* http://core-project.eu/documents/Tuning%20G%20Formulating%20Degree%20PR4.pdf

Moon, J. (2002), The Module and Programme Development Handbook, London: Kogan Page Limited: http://books.google.co.uk/books?id=1uKQAgAAQBAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

Moon, J. (2004). Linking levels, learning outcomes and assessment criteria, Edinburgh: http://www.ehea.info/Uploads/Seminars/040701-02Linking_Levels_plus_ass_crit-Moon.pdf

Moon, J. (2004). Some thoughts on learning outcomes – their roles and use in higher education in the UK; Presentation slides from the 'Using Learning Outcomes' Conference, Edinburgh: http://www.ehea.info/Uploads/Seminars/04070102Moon.pdf

Vlăsceanu L., et al. (2004), Quality Assurance and Accreditation: A Glossary of Basic Terms and Definitions, Papers on Higher Education, UNESCO-CEPES: http://siteresources.worldbank.org/INTAFRREGTOPTEIA/Resources/UNESCO_Glossary_of_QA_and_Accreditation.pdf

Project outcomes:

Competences in Education and Recognition project (CoRe): http://www.core-project.eu/

EAR Manual – a European Area of Recognition project: http://www.eurorecognition.eu/emanual/

EMQT project (Erasmus Mobility Quality tools), co-funded by the EU Lifelong Learning Programme: https://lirias.kuleuven.be/handle/123456789/403903

European Grade Conversion System project (EGRACONS), co-funded by the EU Lifelong Learning Programme: http://egracons.eu/

European Recognition Manual for Higher Education Institutions: http://eurorecognition.eu/Manual/EAR%20HEI.pdf

Joint Degrees from A to Z project, co-funded by the EU Erasmus Mundus Programme: http://www.nuffic.nl/en/expertise/jdaz

Mapping University Mobility project (MAUNIMO): http://www.maunimo.eu/index.php/the-maunimo-project

Portal on joint programmes of the European Consortium for Accreditation in Higher Education (ECA), co-funded by the EU Erasmus Mundus Programme: http://ecahe.eu/w/index.php/Portal:Joint_programmes

Practical Guide to designing degree programmes with integrated transnational mobility – MOCCA project (Model for Core Curricula with Integrated Mobility Abroad), co-funded by the EU Socrates Programme.

Student-Centred Learning toolkit for students, staff and higher education institutions, Brussels, project of the European Students Union, co-funded by the EU Lifelong Learning Programme: http://www.esu-online.org/resources/6068/Student-Centred-Learning-Toolkit/

Tuning Academy project: http://tuningacademy.org/

Annex 4
Examples: programme profiles



Examples for programme profiles and formulations of programme learning outcomes

The examples below show different ways of describing programme profiles and/or single course units. These are not absolute models to be followed, but examples of good practice, based on the recommendations of the ECTS Guide.

Example I

Description of the first cycle degree programme in Computer Engineering and learning outcomes for the course unit Physics I

Profile of the degree programme

The Bachelor's degree programme in Computer Engineering is designed to prepare students with a sound cultural background based on proficiency in different engineering areas and strong computer science expertise. Courses are intended to provide participants with the skills needed to design, install and maintain computer systems and computer networks, software applications, industrial automation systems, management information systems, integrated processing and control systems. The Computer Engineering graduate is mainly an engineer as well as a good IT professional.

Key learning outcomes

Graduates of the first cycle degree programme in Computer Engineering will be able to: design, install and maintain computer systems and computer networks, software applications, industrial automation systems, management information systems, integrated processing and control systems.

Occupational profile/s of graduates

Graduates of this degree are qualified to work inside information technology companies specialised in the computer hardware and software production and inside industrial automation industries as well as inside all kind of enterprises using information systems and computer networks for internal production and management processes. They will also be able work as freelancers or independent contractors mainly for the development of digital control systems for specific applications. Moreover, the programme will provide the students with the necessary requirements for academic advancement in the computer engineering and automation field.

Single course unit:

Physics I

Learning outcomes

The student who successfully completes the course will have the ability to master the basic concepts of physics both in Newtonian mechanics and in classical electromagnetism. He/she will be able to demonstrate a solid knowledge of the conservation laws and of the Maxwell equations whose application will allow him/her to solve basic problems of dynamics in mechanical systems and of fields configuration in problems of electromagnetism.

Assessment methods and criteria

Assessment methods

- Final written exam
- Final oral exam

The written exam is considered a threshold to access the final oral exam. A score of 15 points/30 is required to pass the written exam. Once the threshold is passed, the weight of the oral exam on the final score is about 70%.

Assessment criteria

The student will be assessed on his/her demonstrated ability to understand the main contents of the course and to adapt them to specific cases to solve problems. In the written exam (3 hours, 2 problems), the student must demonstrate his/her capability to deploy the basic concepts to find correct answers to a typical series of three questions per problem. During the oral exam (1/2h) the student must demonstrate the ability to put into practice and to execute, with critical awareness, the most important physics laws discussed in the course.

Example II

Description of the First Cycle degree programme in History and learning outcomes for the course unit Modern History

Profile of the degree programme

The degree programme in History has the objective of preparing student for the practice of historical research, thanks to a solid knowledge of the great historiographical themes and debates and the acquisition of methodologies of the treatment and interpretation of the sources, and the use of a clear and rigorous language as appropriate to historiographical discourse. The learning experience is organised through cycles of lectures, seminars, workshops and laboratories. Alongside these activities, the students are able to attend conferences, workshops and meetings in order to have contact with scientific debate at national and international level. The degree programme has four tracks: Ancient History, Medieval History, Modern History and Contemporary History.

Key learning outcomes

Graduates of the first cycle degree programme in History will be able to demonstrate a critical understanding of the relationship between the present and the past; knowledge of and an ability to use the basic techniques of historical research; the ability to identify the relevant scientific literature, bibliography and sources to address a historiographical problem; the ability to communicate research results in various ways according to the target audience; a knowledge of and ability to use the main tools of other social and humanistic sciences, as well as history; a solid knowledge of the general lines of human history; specialised knowledge of one broad period of history (Ancient, Medieval, Modern/Contemporary); an ability to communicate in at least one language of the EU, in addition to Italian; as well as basic ICT competences for communicating, retrieving and elaborating on historiographical texts and data.

Occupational profile/s of graduates

Those holding the first cycle award (Laurea) in History are able to carry out various activities for public and private organisations, with responsibilities relating to coordinating and executing historical research, to preserving and valorising the cultural patrimony, especially as regards archives, libraries and material culture; to publishing, journalism and in the various contexts in which historical culture and its popularisation are useful, including public administration and international cultural relations. Graduates can enter programmes for the preparation of teachers in the areas of History and Literature; they can compete for positions in the public sector linked to teaching, archive management, libraries and museums, parliamentary documentation and information services, and diplomatic careers.

Single course unit:

Modern History

Learning outcomes

The student who completes the course successfully will be able to demonstrate a solid knowledge of the main processes and events in European and world history from the age of the geographic explorations to the Napoleonic period.

Furthermore he or she will be able to demonstrate up-to-date and specific knowledge of the Spanish Empire in a Mediterranean and Atlantic context, and of the historiographical problems relating to it; and will be able to read and analyse texts and documents from the period.

Assessment methods and criteria

Assessment methods

- Final oral exam
- Periodic written tests

Students who attend the lectures and participate in the discussions and analyses of documents may take periodic written exams, normally consisting of written answers in essay form to questions relating to the course material, which will be evaluated and taken into account in the final oral examination. Those who are unable to attend are evaluated only in the final oral examination.

Assessment criteria

The timing and the form of the periodic written exams for those who attend are discussed with the students during the lectures. The final oral examination aims to ascertain that the student is able to demonstrate knowledge of the course material and to discuss the chosen monographs critically and comprehensively.

Example III

Description of the First Cycle degree programme Business Administration

Title of the programme:

Business Administration

Level of programme:

Professional Bachelor's degree programme

Qualification awarded:

Enterprise and Establishment Manager

Level of qualification:

On successful graduation from the programme, the graduate obtains a Professional Bachelor's Diploma and the qualification: 'Enterprise and Establishment Manager' which corresponds to the 5th professional qualification level and it corresponds to the level 6 of the Latvian Qualifications Framework (LQF) and European Qualifications Framework level 6.

Specific admission requirements:

Enrolment in the study programme, is organised according to the Enrolment Regulations of the School, which are endorsed by the Senate for each coming academic year.

Specific arrangements for recognition of prior learning:

For recognition of non-formal and informal learning there is a legal framework to promote and implement lifelong learning. On 10 January 2012, the Cabinet of Ministers issued 'Rules of Procedure for Recognition of Learning outcomes in Prior Learning or professional experience', Number 36. The procedural documents have been developed by the School and endorsed by the Senate. Lifelong learning activities have been designed to facilitate LLL. Programmes are designed with learning outcomes which ensures transparency and comparability. ECTS is applied to lifelong learning. General arrangements for the recognition of non-formal and informal learning are explained in the Rules of Procedure for the Recognition of Prior Learning which were endorsed by the Senate in 2012. The document explains the process, the criteria and the recognition.

Example III

Qualification requirements and regulations:

In order to obtain the professional Bachelor's degree and qualification, the student has to fulfil the following programme requirements:

- Acquire general and course specific course learning outcomes
- Acquire optional course learning outcomes
- Follow a company placement
- Prepare and defend the Bachelor's paper

Profile of the programme:

The programme equips students with the knowledge, skills and abilities to become competent managers – in changing socio-economic conditions. Students learn to apply their knowledge by managing processes, solving problems, and making decisions. The awarded qualification acknowledges that graduates are able to determine and formulate enterprise performance principles; to plan and manage work according to the business objectives; and to work with people and be ready to adapt in rapidly changing management environments. This is in accordance with the category 5 professional qualification level of the professional standard 'Enterprise and Institutional Manager' and corresponds to level 6 of both the Latvian Qualification Framework (LQF) and the European Qualifications Framework. The students acquire 240 ECTS (160 Latvian credits) in an international study environment. The students are eligible to study under Erasmus+ exchange programme. They also have the opportunity to study with international academic staff from partner universities. Organisation and management of internships is part of the programme.

Example III

Key learning outcomes:

In the programme, students will acquire the ability to comprehend economic development regularities and the processes of the national economy. They will learn to explain them, take part in substantive discussions and make decisions according to changing circumstances.

They will be able to apply the knowledge gained in entrepreneurship management according to operational and strategic aims. They will learn to follow the implementation process, and to make decisions and adjustments in order to improve operational and strategic activities.

Students should be able to carry out professional activity, formulate and analyse information and problems and find solutions in their profession, using a scientific approach.

Moreover, they will understand how to act ethically and to take responsibility for the impact of their professional conduct upon the environment and society.

Finally, students will feel comfortable assuming responsibility in a team setting while delegating and coordinating tasks. This includes planning and organising their work efficiently and dealing with conflict situations.

Occupational profiles of graduates with examples:

Graduates work in companies and institutions, both public and private, they work in small to medium sized companies as managers/ heads of departments.

Access to further studies:

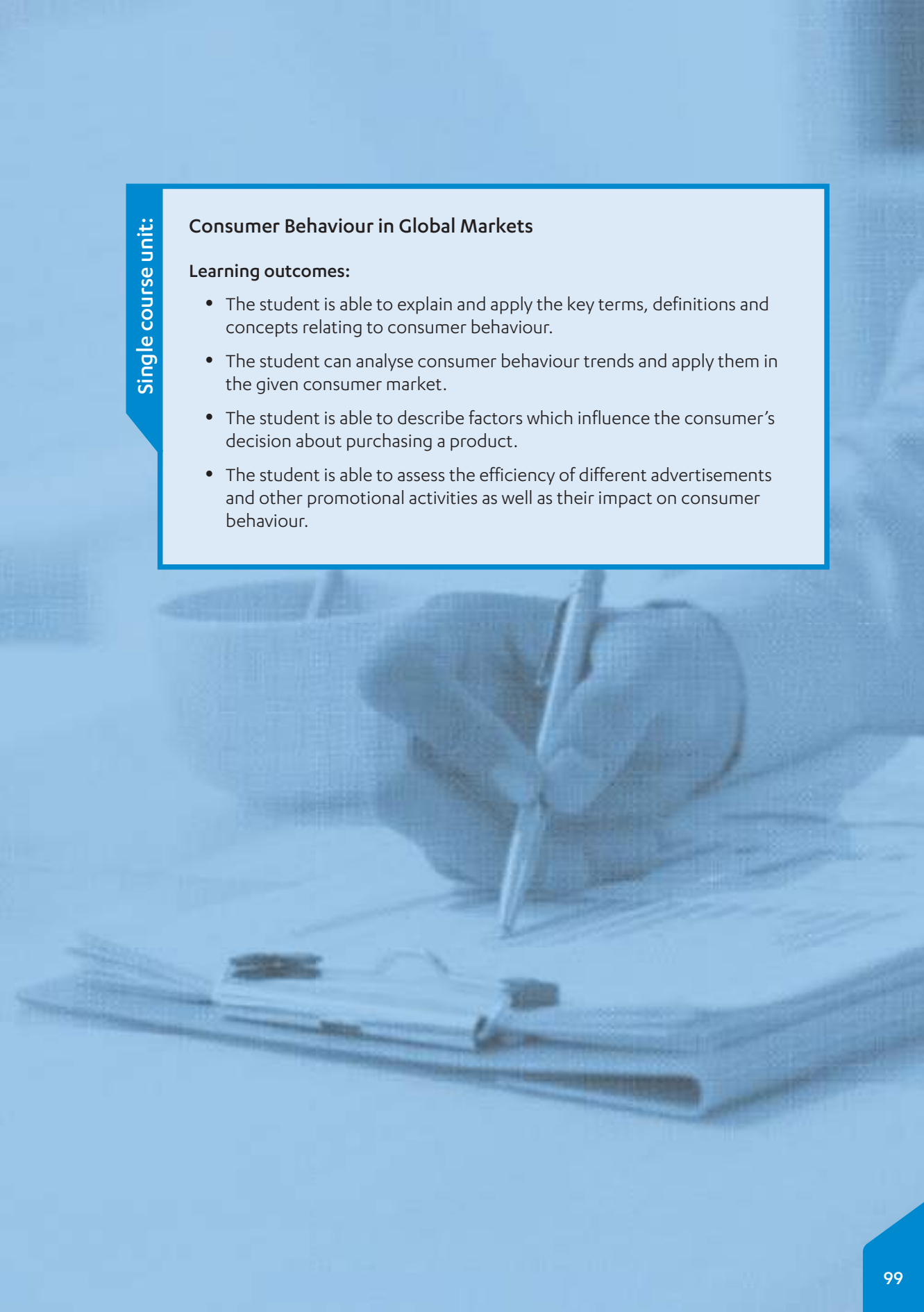
The graduates of professional Bachelor's degree programme are eligible for further studies at Master degree programmes.

Single course unit:

Consumer Behaviour in Global Markets

Learning outcomes:

- The student is able to explain and apply the key terms, definitions and concepts relating to consumer behaviour.
- The student can analyse consumer behaviour trends and apply them in the given consumer market.
- The student is able to describe factors which influence the consumer's decision about purchasing a product.
- The student is able to assess the efficiency of different advertisements and other promotional activities as well as their impact on consumer behaviour.



Example IV

Description of the second cycle degree programme in 'Advanced Spectroscopy in Chemistry' and learning outcomes for the course unit 'Mass Spectroscopy'

Profile of the degree programme:

The Master's programme prepares students to become experts and develop international skills that prepare them for doctoral studies, and/or professional industrial careers in chemical analysis and characterisation of the structure of materials. A mobility scheme ensures that, in addition to high specialisation and access to state-of-the-art technologies, students will follow a common core curriculum of studies in different higher education institutions throughout Europe.

Key learning outcomes:

Students will acquire basic skills in:

- chemical analysis
- structural characterisation
- imaging and molecular modelling
- characterising fast reactions
- quality control
- materials

Students will acquire related skills in:

- conducting research projects
- decision-making in process management
- foreign languages (presenting a scientific project in English, both orally and in writing)
- conducting projects in an international and multicultural context
- geographical mobility

Single Course Unit:

Advanced Spectroscopy in Chemistry

Unit title: Mass Spectroscopy (**Prof. XY**).

Unit code: ASC 01 –LI semester I.

ECTS credits: 5 credits

Prerequisites: Bachelor in chemistry or equivalent

Course description:

The course covers aspects of molecular mass spectrometry including the most recent developments in instrumental design, techniques and understanding of mass spectral processes. The methods available for the introduction of analytical samples are presented, and the advantages and disadvantages of these methods considered. The different types of mass analysers, their working principles and performances are discussed. Current software tools for data-dependent analysis and on-line techniques are described. Examples are presented of the application of mass spectrometric techniques in different areas of chemistry.

Aims:

The aims of this unit are:

- To build upon and extend the theoretical and instrumental concepts introduced during the Bachelor degree programme.
- To develop the competence and confidence of the students in mass spectrometry.
- To highlight modern advances in instrumentation and techniques within mass spectrometry.
- To identify appropriate instrumentation for particular applications.

Single Course Unit:

Learning outcomes:

After completing this unit the student should be able to:

- Discuss in a comprehensive way the methods available for the introduction of samples to a mass spectrometer.
- Identify methods for ionisation and their advantages and disadvantages.
- Review critically the available types of mass analysers.
- Discuss the use of software in obtaining and analysing mass spectral data.
- Identify the most suitable instrumentation for specific applications and describe the extent and limitations of the data obtained.
- Interpret mass spectral data and present the conclusions drawn in written and oral form.
- Explain to non-specialists how mass spectrometry can be expected to provide valuable information in different areas of chemistry and related disciplines.

Teaching and learning activities:

Lectures and colloquia: 40 hours

Student centred learning: 90 hours

Total student effort: 130 hours

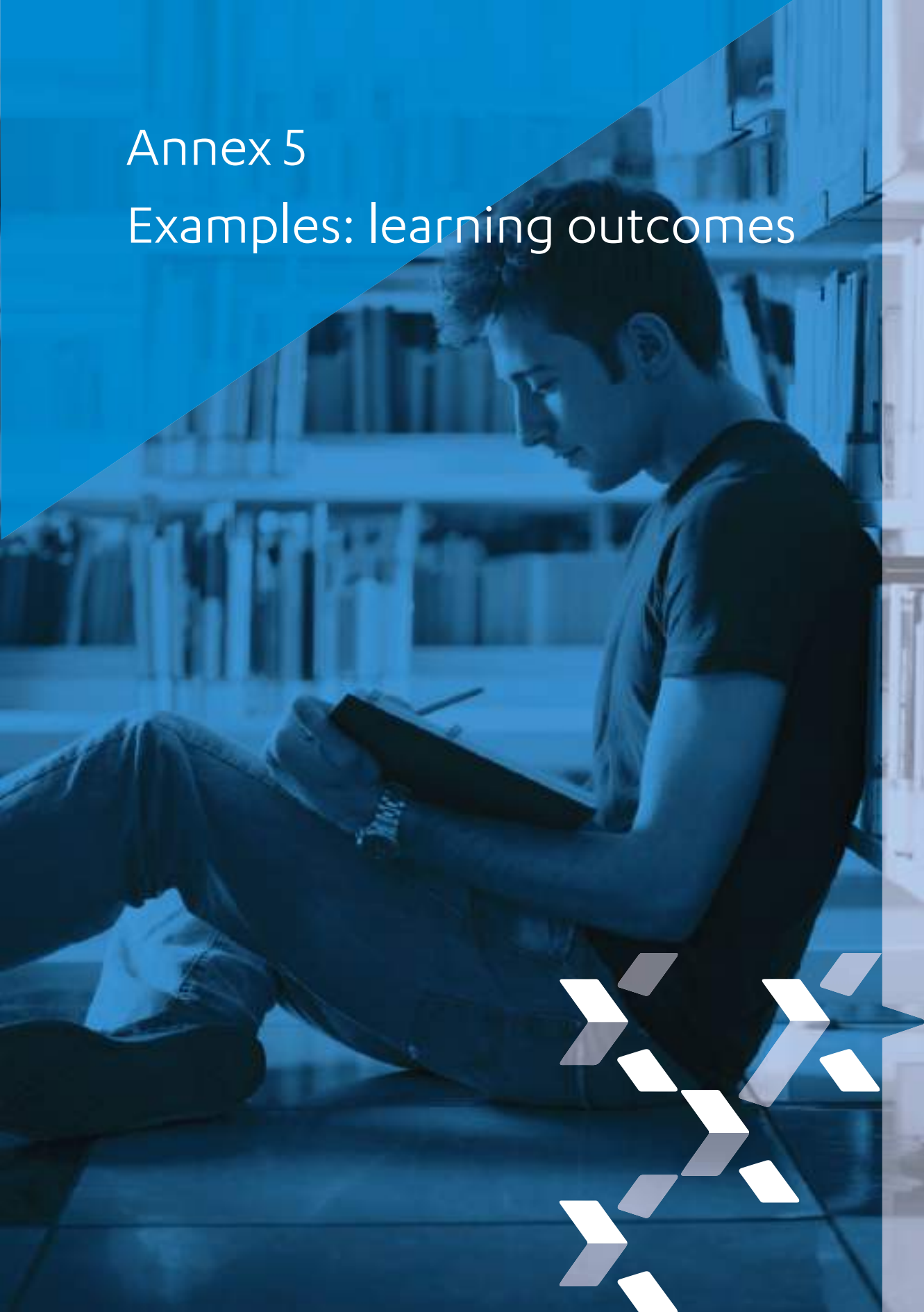
Assessment criteria:

Examination on completion of teaching period: written or oral (weighting 100%).

Bibliography:

Mass Spectrometry, Principles and Applications, E. de Hoffmann and V. Stroobant, Wiley, Chichester, 2001.

Annex 5
Examples: learning outcomes



Sample learning outcomes breakdown

Example

Learning outcomes breakdown for the second cycle degree programme (Advanced Master) Marketing Analysis

Learning outcome 1: Competence in marketing analysis

LO 1.1 Developing complex marketing decision models based on customer relationship management theories.

LO 1.2 Integrating marketing decision systems in a real-life company setting.

LO 1.3 Independently and critically analysing business relevant issues using data mining and informatics.

LO 1.4 Creatively applying state-of-the-art data mining techniques on business relevant issues.

LO 1.5 Creatively applying state-of-the-art advanced market research methods on business relevant issues.

Learning outcome 2: Research competence

LO 2.1 Selecting and validating data mining techniques and statistical techniques to optimally model complex marketing problems.

LO 2.2 Translating complex marketing problems into a scientific research question.

LO 2.3 Applying a literature study in international, peer-reviewed journals to complex marketing problems.

LO 2.4 Validating the results of own research with scientific marketing literature.

LO 2.5 Leveraging the structure of complex data.

Example

Learning outcome 3: Intellectual competence

LO 3.1 Mastering different programming languages and software tools as a means to create complex marketing decision models.

LO 3.2 Continuously expanding one's own methodological competencies in an interactive manner.

LO 3.3 Independently drawing correct conclusions for complex marketing problems.

LO 3.4 Integrating competing views of different stakeholders into a single marketing solution.

Learning outcome 4: Competence in collaborating and communicating

LO 4.1 Scientifically correct reporting the relevant results of own marketing research.

LO 4.2 Executing a real-life business project in an international and interdisciplinary team with different levels of experience.

LO 4.3 Producing a professionally written report on complex marketing issues and their solutions.

LO 4.4 Performing a professional oral report on complex marketing issues and their solutions.

LO 4.5 Communicating marketing solutions to professionals and laymen in English.

LO 4.6 Making a significant individual contribution to a real-life business project.

Learning outcome 5: Societal competence

LO 5.1 Integrating consequences of new developments in data collection.

LO 5.2 Adjusting decision models to constraints and business objectives.

More information on the European Union is available on the Internet (http://europa.eu).

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