



ECVET-ECTS:

BUILDING

BRIDGES AND

OVERCOMING

DIFFERENCES

A METHODOLOGICAL GUIDE PRODUCED IN THE
FRAMEWORK OF THE BE-TWIN PROJECT

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¹ →
**RECOMMENDATION
of THE EUROPEAN
PARLIAMENT AND
OF THE COUNCIL
on the establish-
ment of a European
Credit System for
Vocational Education
and Training (ECVET)**

² The Be-TWIN project gathers the following partners: CCIP (Chambre de commerce et d'industrie de Paris), France; Stratford-upon-Avon College, United Kingdom; University of Ruse, Bulgaria; GIP Rectorat de Paris, France; Fédération de la Plasturgie, France; CPV (Veneto Productivity Center), Italy; USP Venezia (Ufficio Scolastico Provinciale di Venezia), Italy; UNICA (Network of the Universities from the Capitals of Europe), Belgium; Lifelong Learning Network Staffordshire and Shropshire, United Kingdom; ZDZ (Centre for Vocational Development in Kielce), Poland; EMC (European Marketing Confederation), Belgium; ENAIP (National Agency of Vocational Training), Italy; DEKRA Akademie GmbH, Germany; Econometrica Ltd, Greece.

The methodology seeks to address the need for a comprehensive concept of Education and Training in Europe, which the European Qualification Framework has introduced. As the Recommendation on ECVET points out, there is a necessity to “facilitate the compatibility and comparability between credit system used in VET and the ECTS, which is used in the higher education sector, and thus [to] contribute to greater permeability between levels of education and training.” One of the major challenges when implementing ECVET remains its linkage to the existing ECTS: “ECVET should be compatible with ECTS so as to enable bridging vocational education and training and higher education.” ¹

The methodological guide is the result of the first phase of the Be-TWIN project, which was selected in the framework of the call for proposals EACEA/14/2008 under the Lifelong Learning Programme: “Award of grants for projects to test and develop the credit system for vocational education and training (ECVET).”

Partners ² from very different backgrounds (VET providers, universities, ministries of education, representatives from the business world) met in order to agree on this new, innovative methodological proposal articulating both credit systems. Their discussions, perspectives and experiences in the field of vocational education and training, higher education and credit systems, led to this proposal. This document is thus the result of the discussions which took place during working groups’ meetings and of the written contribution from the partners. It has to be considered as a compromise between these points of views, but most of all it is the result of a one year long dialogue, which enabled the partners to build upon mutual trust and understanding in order to produce this guide. This methodological guide benefited from the first results of the actual implementation of the methodology in real case studies taking place in the framework of this project. Although this work, to be carried on until 2011, is far from being finished, it has enriched the methodology through a practical angle.

The methodology fundamentally rests on three pillars, which underpin both the methodology required to link ECVET and ECTS and the actual case studies carried out within the Be-TWIN framework.

1. Cooperation

refers to the enhanced interaction between higher education and vocational education and training. Cooperation based on mutual trust, enhanced understanding of both credit systems and an increased sense of the opportunities of cooperation will form the basis for any future endeavours.

2. Trust

Tools we have developed, e.g. **national quality assurance systems** complying with European criteria; **qualification frameworks** serving the transparency and understanding of different qualifications; **credit systems** (ECTS and ECVET) or standardized descriptions of a concrete qualification in the Diploma Supplement or the Europass, could contribute to mutual trust that needs to be well established between the two spheres.

3. Diversity

means respecting the autonomy and specificity of each stakeholder (training providers, local, regional and national authorities, certifying bodies, etc.). The partners agreed very early on that respect for the uniqueness of institutions' missions and traditions should further strengthen the partnership. Only when higher education and the vocational education and training sector have a clear grasp of each other's identity can they engage in open and fruitful debate.

The Be-TWIN Philosophy

The methodology proposed by Be-TWIN strives to be instrumental for “a dialogue” between two important instruments in higher education (HE) and vocational education and training (VET) - the ECTS and ECVET credit systems. Both systems aim at facilitating accumulation and transfer of assessed learning outcomes and at enabling recognised mobility in Europe, as well as fostering lifelong learning and the transparency of European educational systems. In the context of Be-TWIN, learning outcomes shall operate as the primary information layer.

Learning outcomes have been defined with slightly different nuances in different documents. It is vital for Be-TWIN to stress that these different meanings can co-exist based on a clearly indicated and transparent choice for learners and users.

Underneath the layer of learning outcomes both ECVET and ECTS carry different, additional, yet equally important secondary information layers. Whereas ECVET informs about the relative importance of a unit of learning outcomes vis-à-vis the overall qualification, ECTS indicates the time invested to obtain a certain learning outcome in terms of the workload necessary for an average student in full-time mode of delivery. The prioritising of learning outcomes in both systems in the Be-TWIN approach implies the temporary downgrading of the respective secondary layer of information.

Be-TWIN sets out to go beyond mere vertical or horizontal mobility. It attempts to conceptualise training and learning as a lifelong continuum which offers individuals various points of entry and departure throughout their lives. In order to breathe life into the idea of a lifelong learning “rucksack”, which equips learners to cross not only geographical borders but also sectoral barriers honouring achieved qualifications, Be-TWIN suggests a model which rests on transparency and readability of learning outcomes and learning activities.

The Rationale of Be-TWIN

The project strives to agree on a common language and to define underlying key concepts as a first step of the methodology. The following key concepts were identified to feature in the glossary of terms (European Definitions' Framework)

Assessment

Learning outcomes are never operational in a vacuum but have to be linked to external (level) descriptors and transparent assessment methods. New approaches to assessment could be developed and/or employed in cooperation between higher education and vocational education and training. In order that learning outcomes are fully realised, a rigorous quality assurance system has to be in place with appropriate delivery and feedback in line with innovations in teaching and learning

Credits/ credit points

The project aims at further developing the role and value of credits and credit points in both systems. The different perspectives and focus should be taken into account when devising bridges between ECTS and ECVET.

Diversity

Both concepts embrace the dimension of diversity. The diversity of national and/or regional educational strands shall be fully respected while mutual understanding and permeability shall be supported and championed whenever possible.

Freedom of an institution to link type of programme to type of learner (selection)

This point refers to the fact that any institution designing the profile and learning outcomes of degree programmes sets parameters for potential learners seeking to enrol on such programmes. The institution designs the profile and learning outcomes and then selects the learners who it considers appropriate.

Lifelong learning as a continuum comprising initial and post-experience education

Be-TWIN supports an approach which focuses on lifelong learning when devising bridges between ECTS and ECVET.

Outcome orientation

Outcome orientation, which includes the focus on learning outcomes, shall be established as the overall priority as it allows for identifying the path between higher education and vocational education and training.

Permeability

The project strives to identify the transit routes and pathways within and between the systems and between the labour market and both systems. Permeability also refers to the idea of integrating formal, informal and non-formal learning in the sense of lifelong learning.

Potential usage of the Be-TWIN Methodology

In the first place, the methodology can serve stakeholders both from the field of VET and HE, as will be shown in the sections introducing a simplified model of the **matrix** (page 25) and **practical examples from higher education and vocational education and training** (page 29), which present the potential for diverse usages of the matrix.

Secondly, the methodology could be used for facilitating the assessment and recognition of any type of prior learning, even if the system does not work with credits. This is of significance as today's "typical learners" will most probably not be typical learners in the future. More and more applicants will seek recognition of prior learning (formal, non-formal or informal learning). The condition, however, is that prior learning is described in the form of learning outcomes and assessed accordingly.

Some further innovatory potential usages of the Be-TWIN are listed below

1 — Be-TWIN can open up valuable avenues of *curriculum development*. Its application may be instrumental in highlighting shortcomings and in turn suggesting potential remedies for deficits in curriculum design.

2 — Be-TWIN can be employed to boost learner-centredness as it champions well-formulated and thoroughly assessed learning outcomes. Through this focus on learning outcomes it offers learners a clearer view of the demands made upon them while studying for a qualification³ and the learning outcomes it enables them to achieve.

3 — Be-TWIN enables a better mutual understanding and greater *permeability between VET and HE*

4 — Be-TWIN increases the readability and transparency of qualifications through highlighting the relevance and significance of the Diploma and Certificate Supplements.

Further scenarios for using the methodology (if put in place at institutional level) for individuals could entail for example:

5 — In the framework of a *geographical mobility*: if a learner wants to be mobile and spend a period of time abroad in the framework of his/her training programme, the Be-TWIN methodology could improve the recognition of mobility. This will be achieved by identifying clearly which learning outcomes will be achieved and assessed in the context of this mobility, and through which learning activities they will be obtained. This would of course need to be formalised in a Learning Agreement and a Personal Transcript.

6 — In the framework of *vertical mobility*: if a learner wants to have part of the learning outcomes he/she gained through a vocational degree recognised when moving to another learning context (e.g. higher education), the methodology developed would help him/her to identify more easily the learning outcomes he/she has gained and the related courses and modules he/she has followed in order to have them recognised by the receiving institution. These recognition procedures remain subject to prior agreements among the institutions, but the methodology seeks to make such agreements easier by helping to present the achieved learning outcomes in a transparent way.

7 — In the framework of *accreditation of prior learning for an adult learner*: if an adult learner wants to follow a complementary training pathway (in his/her home country or abroad) and have it taken into account in his/her actual situation, the methodology offers him/her the possibility to better formulate and identify the learning outcomes already gained and the ones he/she seeks to achieve by taking this additional training route.

³ In higher education qualification is usually understood as "any degree, diploma or other certificate issued by a competent authority attesting the successful completion of a higher education programme" (Lisbon Recognition Convention, 1997).

Be-TWIN does not exist in a vacuum and needs solid contextualisation to manifest its full potential. The following three dimensions provide valuable anchoring to the Be-TWIN methodology and shall thus be addressed below:

- 1 Qualifications Frameworks
- 2 Lifelong Learning and Recognition
- 3 Transparency

Qualifications Frameworks

Learning outcomes constitute the basic building blocks of qualification frameworks. In 2005 the European Commission started to work on the → [European Qualification Framework for Lifelong Learning \(EQF-LLL\)](#). The proposal for the EQF was launched by the European Commission in September 2006. The recommendation on the European Qualification Framework for Lifelong Learning was formally adopted by the European Parliament and the Council on 23 April 2008. The core of the EQF-LLL consists of 8 qualification levels described through learning outcomes (knowledge, skills and competences), with levels 5-8 covering the tertiary sector.

Since 2003, under the Bologna Process and independent of the European Commission initiative, the overarching Framework for → [Qualifications in the European Higher Education Area \(QF-EHEA\)](#) (the full text is available [here](#)) was adopted at the Conference of European Ministers responsible for higher education in Bergen, 19-20 May 2005. The

QF-EHEA encompasses three cycles (1st cycle - Bachelor, 2nd cycle - Master, 3rd cycle - Doctorate), generic descriptors for each cycle based on learning outcomes and competences (the so-called Dublin Descriptors), and credit ranges in the first and second cycles. It provides an overarching framework for qualifications in the EHEA consisting of three main cycles, with additional provision for a short cycle within or linked to the first cycle. The ministers committed themselves to elaborating national frameworks for qualifications compatible with the overarching framework for qualifications in the EHEA by 2010. This decision was revised in 2009 and the deadline extended to 2012, which is the same deadline set out for the referencing of National Qualification Frameworks to the EQF by the member states.

Thus at higher education level it was necessary to align the two qualification frameworks at European level. Both frameworks have their own descriptors. They are not identical, however, to a large extent compatible. The EQF levels 6,7,8 correspond to the levels (cycles) 1-3 of the QF-EHEA. This compatibility was underlined by the Ministers gathered at the Bologna Conference in London: “We are satisfied that national qualifications frameworks compatible with the overarching Framework for Qualifications of the EHEA will also be compatible with the proposal from the European Commission on a → [European Qualifications Framework for Lifelong Learning.....](#)” (London Communiqué, 2007)⁴.

⁴ Since its adoption by the member states and the European Parliament this proposal turned into an official Recommendation.
→ [link](#)



Lifelong learning and Recognition

Lifelong learning

In the past it could be argued that education was traditionally connected with gaining a certificate or a diploma which gave a qualification for a particular job, usually performed for a very long period, if not for the entire life of the individual. Individuals stayed with one employer during their whole working life and if not with the same employer, then usually within their originally chosen profession. As both labour markets and professional careers become increasingly flexible this traditional pattern no longer applies. There are many reasons for this shift, the most visible being the fast development of new technologies and the rapid development towards knowledge-based societies, which gave birth to new professions while traditional ones significantly change or gradually disappear. Nowadays, it is increasingly common for an individual to change his/her profession several times during working life/career, and to experience various working contexts.

On the other hand, education has more roles than only preparation for getting a job. It also contributes to personal development, a better quality of life and for opening up to a wider range of activities outside their working life. Furthermore education and learning play an irreplaceable role in preparing learners *“for active citizenship in democratic societies”*.⁵

The central consequence of this paradigm shift is that the initial diploma or certificate obtained by an individual in formal education is only one of many. This requires substantial changes in education and training systems and in their organisation.

Lifelong learning is defined in different ways in individual countries and the definitions serve different purposes. Very often it is understood as only one aspect of education and training, offering those who have already graduated, courses of further and/or continuing education. The perception of lifelong learning in EU policies, codified already in the year 2000 in the → **Memorandum on Lifelong Learning** issued by the European Commission, is broader than this assumption. This Memorandum offers a much wider and deeper understanding of lifelong learning. The Memorandum sees lifelong learning, *“as a seamless continuum ‘from cradle to grave’ “... and further develops the concept: “Lifelong learning is no longer just one aspect of education and training; it must become the guiding principle*

for provision and participation across the full continuum of learning contexts.”

The same concept has been adopted by the Council of European Ministers in 2006: lifelong learning was again defined as a continuous learning process enabling all individuals *“to acquire and update knowledge, skills and competences at different stages of their lives and in a variety of learning environments, both formal and informal, for the purpose of maximising their personal development, employment opportunities and encouraging their active participation in a democratic society”*.⁶ In the Leuven Communiqué of Ministers responsible for higher education (April 2009), a similar definition can be found: *“Lifelong learning involves obtaining qualifications, extending knowledge and understanding, gaining new skills and competences or enriching personal growth. Lifelong learning implies that qualifications may be obtained through flexible learning paths, including part-time studies, as well as work-based routes.”*

All of the above-mentioned examples should be seen against the background that the provision of education, as stated in the Leuven Communiqué, remains a public task and responsibility. In line with the social dimension championed by the Bologna Process lifelong learning should ideally strengthen an individual's learning opportunities. The social dimension stresses *“the need for appropriate conditions for students so that they can complete their studies without obstacles related to their social and economic background. The social dimension includes measures taken by governments to help students, especially from socially disadvantaged groups, financially and economically, and to provide them with guidance and counseling services with a view to widening access.”*⁷ It should open up novel avenues of acquiring knowledge, skills and competences. At the same time the provision of these opportunities remains a public obligation. Lifelong learning must not be misinterpreted as a simple shift of responsibility to the individual learner.

The implementation of lifelong learning sparks a number of consequences for the educational systems at national level as well as for European policies. At national level, it means that the different levels and sectors of education and training systems must work in close cooperation, taking also into account the non-formal domains. This results in a significant change in perception and thinking, which requires going beyond existing differences, that is to say, building bridges and flexible learning pathways between different parts of existing systems.

⁵ → Leuven Communiqué of Ministers (2009)

⁶ → 2006, Council of Europe Rec(2002)6 of the Committee of Ministers to member states.

⁷ → Cf. Bergen Communiqué, 2005

Recognition

The lifelong learning continuum, as mentioned above, means that an individual should be able to be mobile, to acquire and update knowledge, skills and competences at any stage of a professional as well private life, and in a variety of contexts. This, however, signals that previous qualifications have to be taken into account for further study and/or employability purposes and recognised as sufficient for any of the identified purposes. A necessary prerequisite for this is the recognition of prior learning – formal, informal and non-formal – either within a national or international education and training system. The recognition of qualifications has undergone many changes in the last twenty years. From the “nostrification” (usually in the case of a foreign qualification ensuring that it is almost identical with the national one) through “equivalence” (where it was expected that the learner’s qualification could substitute the one provided by the respective institution) to the procedures we call recognition of qualifications today. This substantial change in the approach towards recognition of foreign qualifications and their components was codified in the Council of Europe/UNESCO → **Lisbon Recognition Convention** (in full name Convention on the Recognition of Qualifications Concerning Higher Education in the European Region, adopted in Lisbon, in 1997 and subsequently also referred to as LRC). It defined recognition as “a formal acknowledgement by a competent authority of the value of a foreign educational qualification with a view to access to educational and/or employment activities”.

The Lisbon Recognition Convention also operates with the term of “substantial differences” i.e. an assessment of the previous qualification which led to a decision whether it could be accepted or whether there are substantial differences which prohibit it from being recognised. The novelty of the Lisbon Recognition Convention lies in the fact that it shifts the responsibility for recognition from the individual to the institution. It argues that the institution needs to prove that the above-referenced substantial differences exist and not vice versa, i.e. that the individual has to prove his/her abilities.

The credential evaluators generally evaluate the level of the qualification achieved, its content and time necessary for achieving a certain qualification. The rethinking is that this attitude could be applied in the wider context of lifelong

learning, in which the learning outcomes can be acquired in the formal, non-formal or informal domains. This requires a significant shift in the perception of the qualification. Instead of assessing procedures and content of previous education, a shift towards assessing learning outcomes of the previous learning should happen. Thus the learning-outcomes approach, based on knowledge, skills and competences achieved, is the basis for enabling change. Only the learning outcomes of the two respective qualifications will be assessed. Today’s reality, however, is far from this vision. If we take the notion of lifelong learning seriously, without such an approach we will not be able to establish the recognition of non-formal and informal learning and we will not proceed further in implementing lifelong learning concepts. A rapidly increasing number of adult learners clearly underlines the growing need for such an approach.

A common European approach can contribute to making our diversified education and training landscape more intelligible and more harmonious. It will furthermore enable us to benefit from common instruments which have been developed so far: credit systems, Diploma and Certificate Supplements, other Europass documents, and last but not least, the European Qualification Framework, the meta-framework which is to be complemented by individual national qualification frameworks. All these instruments are nowadays connected to and/or based on learning outcomes.

To conclude, it should be emphasised that both ECTS and ECVET contain very open and flexible concepts: the Be-TWIN answer is a very general approach, which underlines learning outcomes in a bid to leave ample room for flexibility for individual institutions and their learners. The final achievement of Be-TWIN rests on the coherence of the approach: Be-TWIN represents a system of complementarity, which allows partial overlaps on the basis of learning outcomes. As stated in the → **Get to know ECVET better. Questions and Answers**, the Be-TWIN philosophy is predicated on the idea that no “same learning outcome should be assessed twice”.

3 Transparency

With credits clearly linked to learning outcomes and no longer tied exclusively to the packaging of learning activities, as it is often the case in ECTS, the proposed methodology enhances transparency in general.

The European transparency tools, such as the Diploma Supplement, the Certificate Supplement and the Europass Mobility would particularly benefit from the Be-TWIN approach as the information content would rise significantly. This could contribute to facilitated, optimised recognition procedures and result in the European tools speaking more clearly to a wider target group.

The support of mobility, possibilities of transnational programmes, diversification of the higher/tertiary education landscape and a growing need to establish lifelong learning as an overarching framework for the whole educational system will contribute to widening the spectrum of applicants for higher/tertiary education. A natural consequence will be new types of learners who will have different backgrounds, educationally and socially. They will come with different experiences and expectations resulting in a growing demand for more permeability throughout the entire system. Thus the **Diploma Supplement** will become even more important in times when traditional educational careers, often closely tied to one 'home' institution, become less typical. It represents a Europe-wide information tool, providing *"sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.)"*⁸ and rendering European higher education diplomas more readable and comparable. It does not replace the diploma; it is valid only in conjunction with a diploma. In 2005 the Ministers responsible for higher education agreed that every graduate should receive the

Diploma Supplement issued in a widely spoken language, automatically and free of charge.

The **Certificate Supplement** would benefit from the spread of ECVET tied to gained units of learning outcomes, since it would make this device more useful and transparent.

Also, the **Europass Mobility**, which is used in the framework of European mobility schemes, would be more useful if the acquired learning outcomes mentioned on it were be connected with credit, that is to say ECTS or ECVET, or even both.

By using this new approach all these European tools would eventually gain in usefulness, transparency and clarity.

⁸ See the → **Diploma Supplement Preamble**

GENESIS AND CONTEXTS OF THE TWO CREDITS SYSTEMS



ECTS basics

Brief history

ECTS was originally designed in 1989 as a pilot scheme in the Erasmus programme with the aim of facilitating international mobility of students, more effectively to facilitate recognition of the periods spent abroad. During the two last decades, it has undergone significant modifications, most notably because the Bologna Process introduced sweeping changes. First, it turned from a primary transfer instrument into a transfer-and-accumulation mechanism. In the last two years, in the light of the growing importance of lifelong learning, it has been rethought within the formulation of qualifications frameworks and geared to be in tune with Bologna's overall shift towards student-centredness. The attempt to shift the system of education from being teacher-centred towards student-centred learning has brought major changes into the ECTS system: it has been turned into a learner-centred system for credit accumulation and transfer based on the transparency of learning outcomes and learning processes. Thus the European Higher Education Area gains an instrument to facilitate the planning, delivery, evaluation, recognition and validation of qualifications or part of them.

Today's reality

ECTS has been implemented by the majority of higher education institutions in Europe, and in a majority of countries it is embedded in the legislation.⁹ In the remaining countries ECTS is widely supported, in some cases financially. However, so far implementation practices vary and it is still far from the vision described above.

⁹ → Stocktaking 2009
→ Eurydice study
2009

The Eurydice study prepared for the ministerial conference in Leuven/Louvain-la-Neuve in April 2009 showed the variation in defining ECTS in European countries, different understandings and/or different stages of development. In some countries the ECTS system is based on student workload and learning outcomes, in others ECTS is based on student workload only. Some countries defined ECTS on the bases of contact hours, or contact hours and student workload. In some countries higher education institutions use the ECTS credit system with various definitions of “a credit”. From these observations it follows that a common methodological guide for users is needed. Today the ECTS system finds itself in a transition period between the workload allocated to curricula and “output based ECTS credits” taking into account learning outcomes as described in the → [ECTS Key Features](#) (December 2008) and the → [ECTS User’s Guide, 2009](#) – both published by the European Commission.

Some progress remains to be made in the actual implementation of ECTS in higher education institutions, in order to be in line with the recommendations of the ECTS User’s Guide 2009. By putting learning outcomes at the very core of the methodology Be-TWIN promotes a dialogue between VET and HE. Be-TWIN could contribute to enhancing and improving the implementation of ECTS across HE institutions.

The ECTS Key Features and the ECTS User’s Guide: new output-oriented ECTS system

At the end of 2007, the European Commission published The ECTS Key Features. In this document, ECTS credits are based “on the workload students need to achieve expected learning outcomes”. The ECTS system is described as a tool which enables learners to collect credits for learning achieved through higher education. ECTS is widely used in formal higher education and can be applied to any mode of delivery and attendance (full-time, part-time or distance). The new output-based approach opens possibilities to use the ECTS credit system for other lifelong learning activities as well as prior learning, non-formal and/or informal learning.

ECTS credits are based on the workload learners need in order to achieve expected learning outcomes. 60 ECTS credits are attached to the workload of a full-time year of formal learning

(academic year) and the associated learning outcomes. In most cases, learner workload ranges from 1,500 to 1,800 hours for an academic year, whereby one credit corresponds to 25 to 30 hours of work. This means that “the ECTS credit is a quantified means of expressing the volume of learning based on the workload learners need in order to achieve the expected outcomes of a learning process at a specified level” (The ECTS Users’ Guide 2009). The ECTS credit enables measurement of the students’ workload.

“Workload indicates the time students typically need to complete all learning activities (such as lectures, seminars, projects, practical work, self-study and examination) required to achieve the expected learning outcomes” (The ECTS Users’ Guide 2009). Typical examples could be for the first cycle / Bachelor’s degree programme 180 ECTS credits and for the second cycle / Master’s degree programme 120 ECTS credits.

The allocation of credits is connected with courses/units/modules, although credits could be attached as well to practical placements and/or international mobility etc. (hereafter learning activities). ECTS conveys two components simultaneously: it expresses the workload necessary for meeting the requirements given for the learning activity while at the same time specifying the relative weight of the learning activity within the respective degree programme. However, as a qualification is “multi-dimensional”¹⁰, the ECTS credits themselves do not describe the knowledge, skills and competences a successful learner has gained.

ECTS credit allocation

Credits are allocated to entire qualifications or study programmes as well as to their educational components, i.e. learning activities.¹¹ The allocation of credits to learning activities is integrated into curriculum design. There are different methods as how to associate credits with learning activities. The ECTS User’s Guide 2009 describes two approaches. The learning activities are described and the workload typically needed for a student to complete the activity estimated. The proposals are collected from the staff, evaluated, systemised and the workload of learning activities is expressed in ECTS credits. Thus the learning activities can finish with different numbers of credits – 3, 5, 8 etc. The alternative approach described in the guide recommends that a decision be made in

¹⁰ The attributes of the qualification are e.g. the level, the profile, curriculum based on learning outcomes, ECTS, quality assurance.

¹¹ This includes modules, course units, dissertation work, work placements and laboratory work – note: learning activities in our definition

advance about the size of learning activities giving each the same value or multiplies of it. For example, the basic size is 5 ECTS credits. Whatever method is chosen, the size of learning activities should be reasonable – too small activities could lead to fragmentation, and too big ones could impede mobility.

Thus it is important to underline that the allocation of ECTS nowadays depends on the way the curricula have been designed by the competent institutions, and also to stress that the choice for a training provider in the future to implement ECTS and/or ECVET in a given training programme will depend on the compatibility of the training offer as it is with one credit system and/or the other.

In 2009 in Leuven/Louvain-la-Neuve and in 2010 in Budapest and Vienna the European ministers gathered to discuss the results of the Bologna Process. At the Anniversary Conference in Budapest-Vienna on March 11 and 12, 2010 the official launch of the European Higher Education Area was declared.

For both meetings a number of reports by both independent experts as well as stakeholders were published based on the analysis and evaluation of ten years of the Bologna Process. As the ECTS belongs into the original Bologna tool box, introduced already in the Bologna Declaration in 1999, some reports specifically focussed on its spread and use among the Bologna countries¹². According to the report elaborated by → [Eurydice \(Focus on Higher Education in Europe 2010: The impact of the Bologna Process\)](#) the ECTS system was fully implemented by 36 Bologna countries. More details about the actual implementation were published in the → [Eurydice report in 2009 \(Higher Education in Europe 2009: Developments in the Bologna Process\)](#). This report tried to explain to what extent ECTS is used in higher education institutions. Both reports worked with the definition that ECTS is to be regarded as fully implemented in case that “75% of

institutions and programmes use ECTS for credit accumulation and transfer and when it satisfies the requirements of credits being awarded on the basis of defined learning outcomes and/or student workload”. In the majority of the Bologna countries ECTS was established by law. However, the question remains how the system has been implemented in particular countries and in higher education institutions. The report of 2009 divided countries into three groups. In the first group, comprising 13 countries, ECTS is used for transfer and accumulation and the concept of learning outcomes and workload is operational and it has replaced previous approaches (based on contact hours and/or student workload and curricula). Seven countries, it emerged, used ECTS for transfer and accumulation without introducing the learning outcomes approach. The third group of seven countries used ECTS for transfer and accumulation, however learning outcomes were not introduced and even the concept of workload was not fully accepted. In these countries ECTS credits were still allocated on the basis of contact hours to particular courses/modules or a combination of this approach with student workload.

In 2010 ESU presented the results of their survey among student unions in Budapest.¹³ “Only 12 national systems (i.e. only slightly more than one quarter of all countries) use both student workload and learning outcomes as the basis for the allocation of credits.” On top of this “the ECTS accumulation and transfer function is not fully used”. The incorrect use of ECTS thus leads to overloading the degree programmes and impacts negatively on mobility as well. The reports prepared in the years 2009 and 2010 for the Bologna Ministerial Conference and the Bologna Ministerial Anniversary Conference clearly indicate that the implementation of ECTS will need to remain a priority and challenge for the future, in particular, at institutional level.

¹² For the reports from Leuven/Louvain-la-Neuve click → [here](#); for the presentations and report prepared for the Budapest-Vienna meeting click → [here](#).

¹³ See → [the presentation of Ligia Deca, the Chairperson of ESU](#)

ECVET Basics

Brief history

ECVET is a new European instrument. It has been designed as a European credit system compatible with the specificities of vocational education and training. It should foster greater permeability in VET as well as mobility of European learners and workers and give more flexible pathways for them to achieve mobility. It has a potential to smooth recognition – not only of qualifications but also of their relevant components and to assess and validate prior learning. It was adopted as the → [Recommendation of the European Parliament and the Council on establishment of a European Credit System for Vocational Education and Training \(ECVET\)](#) in April 2009.

Today's reality

ECVET has been tested in a number of pilot projects, often supported and co-financed by the Leonardo da Vinci programme. Via these pilot projects, the concept and principles of ECVET are not only tested but also disseminated. Wider gradual implementation of ECVET is envisaged by 2012.

The ECVET key features and basic elements

According to the technical specifications of ECVET, qualifications are described in terms of units of learning outcomes. The Recommendation on ECVET (2009) defines a **unit of learning outcomes** as “a component of a qualification, consisting in a coherent set of knowledge, skills and competences that can be assessed and validated”. A **credit** for learning outcomes on the other hand means “a set of learning outcomes of an individual which have been assessed and which can be accumulated towards a qualification or transferred to other learning programmes or qualifications”. This means that an assessed unit of learning outcomes leads to obtaining a credit of learning outcomes. The credits thus describe what knowledge, skills and competences a learner who successfully passed the unit gained.

The **ECVET points** are a “numerical representation of the overall weight of learning outcomes in a qualification and of the relative weight of units in relation to the qualification”.

There is a convention to which 60 ECVET credits points are attached to the learning outcomes expected to be achieved in one year of formal full time VET. The credit and ECVET points are thus different entities. While a credit is a set of knowledge, skills and competences the learner has achieved, ECVET points provide information about the weight of units within the qualification.

The system is designed to enable the learner to collect credits for learning outcomes achieved through formal, informal as well as non-formal learning settings. Thus it creates the bases for assessment, validation and accumulation of learning outcomes of prior learning.

ECVET Credit points allocation

ECVET points are allocated to a qualification as a whole and to its units. Allocation of ECVET points to a qualification is based on using an agreement according to which 60 points are allocated to the learning outcomes expected to be achieved in a year of formal full time VET. As specified in the Recommendation, “for a given qualification, one formal learning context is taken as a reference and, on the basis of the convention the total number of points is assigned for that qualification. From this total, ECVET points are then allocated to each unit according to their relative weight within the qualification.”

¹⁴ Recommendation on ECVET, → [link](#)

The number of ECVET points expresses the relative weight/significance of a unit. According to the ECVET Recommendation, the allocation of ECVET points is subject to the following approaches or a combination of them:

— Different stakeholders “value” the different units which are part of the qualification according to the relative importance of the unit’s learning outcomes for the labour market, for progression to other qualification levels or for social integration;

— The complexity, scope and volume of learning outcomes in the unit (i.e. the complexity, scope and volume of knowledge) in relation to the learning outcomes of the overall qualification. Skills and competences in the unit are evaluated with regard to their share in the overall skills and competences of the entire qualification;

— The effort necessary for a learner (estimation of the learners’ effort, workload or learning time needed) to achieve the unit’s required learning outcomes;¹⁴

Whichever method or combination of methods is chosen, the size of the unit should be reasonable – too small units could lead to fragmentation without proper understanding, and too large ones could impair mobility.

The two Credit systems in perspective

There are obvious challenges in attempting to build a bridge between the ECTS and ECVET systems. One of these is conceptual and epistemological, i.e. which types of knowledge, skills and competences are seen as valid and legitimate. It is along this dimension that a fundamental difference can be found. Indeed, training can be seen as referring to those activities undertaken to enable one to perform known tasks well, i.e. to concentrate on types of knowledge, skills and competences which equip the learners with capacities to master defined tasks. Education at all levels, alternatively, might be conceptualised as aiming to develop and prepare individuals to live in an uncertain and unpredictable world. Consequently education prioritises different types of knowledge, skills and competences, accentuating reflection, the autonomy of the individual, critical thinking, or a sense of continuing curiosity. In practice, however, these dividing lines do not apply strictly and each field contains detectable elements of the other.

It might be argued, however, that training is often focused on practical skills such as turning a lathe or making a diagnosis, whereas education is often theoretical in nature and its products are more often than not knowledge-based. These differences in goals highlight a second important issue, namely an understanding of the concept of “vocational”. In its widest sense, this describes all activities, especially learning activities, aimed at preparing an individual for making a living, i.e. performing on-the-job. In a more particular sense, however, it reflects the notion of learning a craft or trade, rather than the learning provided by institutions of higher education. Consequently, when examining learning outcomes on both sides (HE and VET), it is necessary to keep in mind precisely which kinds of results (i.e. knowledge, skills and competences) are reflected in the learning outcomes under examination. Different epistemologies might be inscribed in these learning outcomes and it is the task of programme designers to phrase learning outcomes in a way which renders them mutually intelligible.

Be-TWIN maintains that it is not necessary to try and “twist” these realities, but better to face them: the unit to be compared is not ECTS versus

ECVET, but the qualifications obtained by one process or the other, the qualification being the only common language between academic or training references and professional references. Be-TWIN therefore relies on the co-operation between the two systems to build pathways composed of different types of qualifications, recognising the fundamental differences of the two systems.

As a consequence the ways learning outcomes are described are very different from one training context to another and also from one country to another. In order to avoid confusion and to enhance transparency between sectors and national contexts, learning outcomes should be written thoroughly and accompanied with a clear explanation of the context in which they are acquired and the evaluation procedures attached to it. In the context of Be-TWIN, in order to foster transparency, learning outcomes should be described in terms of knowledge, skills and competences, as required by the EQF Recommendation, and clearly tied to assessment and evaluation procedures.

Moreover it should be borne in mind that both credit systems were developed in slightly different environments and at different points in time. The ECTS system, as described above, underwent several important changes during its 20-years history and is currently again in flux. The ECVET system was defined in 2009 by the Recommendation of the European Parliament and the Council on the establishment of a European Credit System for Vocational Education and Training (ECVET). The following grid attempts to compare what is comparable and thus highlight both – consistencies as well inconsistencies.¹⁵

¹⁵ Based on the presentation by Michel Aribaud, policy officer and ECVET expert at the European Commission, to be published.

At a glance: A Grid on ECTS-ECVET consistencies and inconsistencies

	ECTS	ECVET
Reference	Key Features, 2007, ECTS Users' Guide, 2009	Recommendation of the European Parliament and of the Council on the establishment of ECVET, 2009 Get to know ECVET better; Questions and Answers
BASIC FACTS		
Definition / Explanation	<p>ECTS is a learner-centred system for credit accumulation and transfer based on the transparency of learning outcomes and learning processes. It aims to facilitate planning, delivery, evaluation, recognition and validation of qualifications and units of learning as well as student mobility.¹⁶</p> <p>Credit (ECTS): Quantifying means of expressing the volume of learning based on the workload students need in order to achieve the expected learning outcomes of a learning process at a specified level.¹⁷</p>	<p>ECVET is a technical framework for the transfer, recognition and, where appropriate, accumulation of individuals' learning outcomes with a view to achieving a qualification. ECVET is intended to facilitate the recognition of learning outcomes in accordance with national legislation, in the framework of mobility, for the purpose of achieving a qualification.¹⁸</p> <p>"Credit for learning outcomes" (credit) means a set of learning outcomes of an individual which have been assessed and which can be accumulated towards a qualification or transferred to other learning programmes or qualifications</p> <p>"ECVET points" mean a numerical representation of the overall weight of learning outcomes in a qualification and of the relative weight of units in relation to the qualification.¹⁹</p>
Qualification	Any degree, diploma or other certificate issued by a competent authority attesting the successful completion of a recognised programme of study. ²⁰	A formal outcome of an assessment and validation process which is obtained when a competent institution determines that an individual has achieved learning outcomes to given standards. ²¹
Learning outcomes	<p>Statements of what a learner is expected to know, understand and be able to do after successful completion of a process of learning.²²</p> <p>The Framework for Qualifications of the European Higher Education Area defines them as</p> <ul style="list-style-type: none"> ▶ KNOWLEDGE AND UNDERSTANDING ▶ APPLYING KNOWLEDGE AND UNDERSTANDING ▶ MAKING JUDGMENTS ▶ COMMUNICATION SKILLS ▶ LEARNING SKILLS²³ 	<p>Statements of what a learner knows, understands and is able to do on completion of a learning process and which are defined in terms of knowledge, skills and competences that can be assessed and validated.²⁴</p> <p>The European Qualifications Framework (EQF) defines learning outcomes in terms of</p> <ul style="list-style-type: none"> ▶ KNOWLEDGE ▶ SKILLS ▶ COMPETENCES²⁵

WIDER CONTEXT

Lifelong learning

ECTS was designed for formal, higher education. In its current use it is gravitating towards lifelong learning, which means that informal as well as non-formal settings can also be considered and incorporated. Thus ECTS, which is widely used in formal higher education can be applied to other lifelong learning activities.²⁶

Takes into account a typical ability of an average student in the design of the programme

*A learner can achieve a qualification by accumulating the required units, achieved in different countries and different contexts (formal and, where appropriate, non-formal and informal), while respecting national legislation relating to the accumulation of units and the recognition of learning outcomes.*²⁷

Takes into account the diversity of the learners

Political context and governance

The **Bologna Process** attempts to harmonise the architecture of higher education and create the European Higher Education Area (**EHEA**), EHEA pillars:

- ▶ The Framework for Qualifications of the European Higher Education Area (QF EHEA) – involves ECTS, defines credit ranges & compatible national qualification frameworks
- ▶ **European Standards and Guidelines for Quality Assurance (ESG) – European Quality Assurance Register (EQAR)**
- ▶ **LRC**²⁸

EHEA tools:

- ▶ ECTS
- ▶ Diploma Supplement

Goal: portability of achieved qualification/parts of qualifications within EHEA, i.e. **47 countries in Europe**; emphasis on global cooperation

Copenhagen Process – cooperation and transparency in a highly diversified system

European qualification framework for lifelong learning (EQF) – credits/credit ranges not mentioned

ECVET – European Credit for Vocational Education and Training

European Quality Assurance Reference Framework for Vocational Education and Training²⁹

Goal: enhanced transparency between the systems and mobility of the learners and students based on readability of the learning outcomes described in terms of knowledge, skills and competences.

31 countries: 27 countries of EU and 4 associated countries: Iceland, Lichtenstein, Norway and Turkey.

IMPACT

- | | | |
|-------------|--|---|
| Credits are | ▶ <i>Allocated to entire qualifications or study programmes as well as their educational components/learning activities (e.g. modules, course units, dissertation work, work placements and laboratory work). Credit allocation to educational components is based on their weight in terms of the workload needed for students to achieve the learning outcomes in a formal context</i> ³⁰ | ▶ Allocated to units of learning outcomes |
|-------------|--|---|

Impact	on the Degree Programme – or qualification respectively	on the qualification
--------	---	-----------------------------

- | | | | | | | | | | | | | | |
|---------------------------------------|--|--|-----------------------------------|--|--|-----------------------------------|--|-------------------------------------|--------------------------------|----------------------------|--|--|---|
| ▶ Modularisation of degree programmes | ▶ Smoother recognition of the achieved qualification and/or its part | ▶ Higher permeability in European higher education | ▶ Better balance workload/content | ▶ Structure and comparability: number of credits/workload per year, modules..) | ▶ Design of the learning/teaching/training programme - improved curricula; improved organisation | ▶ Improved recognition procedures | ▶ Possible basis for recognition of prior learning | ▶ Qualification structured in units | ▶ Number and size of the units | ▶ Rules of combining units | ▶ Rules and processes for the assessment, validation and accumulation of learning outcomes | ▶ Design of the assessment, validation and accumulation (AVA) of outcomes processes (including learning outcomes achieved in formal, non-formal and informal learning) | ▶ Enhanced transparency of VET qualifications in Europe |
|---------------------------------------|--|--|-----------------------------------|--|--|-----------------------------------|--|-------------------------------------|--------------------------------|----------------------------|--|--|---|

on learners' emancipation

- ▶ it gives learners more information about the degree programme and paths
- ▶ It offers information on the learning outcomes, which could be achieved
- ▶ It opens up space for more individualisation and specialisation and ensuing individually accentuated paths through the programme as well as flexibility
- ▶ It places more responsibility on the learner

ECTS

ECVET

FUTURE/VISION

Point of departure

There is already a relatively long period of experience with implementation.

Pilot projects – implementation only starting

- ▶ Well embedded in the higher education
- ▶ However, the system underwent several changes: from transfer to transfer and accumulation
- ▶ At present transition from being based on curricula (allocated to learning activities) towards the learning outcomes approach

- ▶ Designed in a “modern” and flexible way
- ▶ Designed to accommodate the lifelong learning approach
- ▶ However, not yet implemented in the national VET systems.

Both systems in motion

Change from curricula driven model to learning outcomes driven model

At present only tested in the framework of pilot projects

Potential for future

Workload ≠ learning outcomes

Workload is associated with learning outcomes – i.e. shift from an input reference oriented system to an output/ learning outcomes based system. The ECTS further specifies the relative weight of the learning activity within the degree programme.

Learning outcomes methodology will enable ECTS to serve assessment and validation of results of prior learning (formal, informal, non-formal)
Formalisation of non-formal and/or informal learning

Learning outcomes ≠ learning process (output reference oriented system)

Designed with the potential to serve assessment and validation of results of prior learning (formal, informal, non-formal)
Formalisation of non-formal and/or informal learning

¹⁶ → ECTS Key Features

¹⁷ → Cf. ECTS Users' Guide 2009

¹⁸ → Recommendation on ECVET, 2009

¹⁹ → Recommendation on ECVET, 2009

²⁰ → Cf. ECTS Users' Guide 2009

²¹ → Recommendation on ECVET, 2009

²² → Cf. ECTS Users' Guide 2009

²³ → Cf. Framework for Qualifications of the European Higher Education Area

²⁴ → Recommendation on ECVET, 2009

²⁵ → Recommendation of the European Parliament and of the Council (May 2008) on the establishment of the European Qualifications Framework for lifelong learning

²⁶ → ECTS Key Features

²⁷ → Recommendation on ECVET, 2009

²⁸ → Convention on the Recognition of Qualifications Concerning Higher Education in the European Region, Lisbon 1997 (Council of Europe/ UNESCO Convention no. 165)

²⁹ → Recommendation of the European Parliament and of the Council (June 2009) on the Establishment of a European Quality Assurance Reference Framework for Vocational Education and Training

³⁰ → ECTS Key Features

Learning Outcomes

The new approach to ECTS cannot be performed without understanding the concept of designing curriculum on the basis of learning outcomes. Learning outcomes comprise the driving force behind contemporary higher education reform often connected to the Bologna Process as a renewed impulse to curriculum development and innovation. *“Learning outcomes are not just an isolated tool at the level of curriculum design but also represent an approach that plays a significant role in a much wider context that includes: the integration of academic and vocational education and training (VET), the accreditation of prior experiential learning (APEL), the development of lifelong learning qualifications frameworks and the development of credit and accumulation systems. They are the foundation stone of the new architecture of educational reform.”*³¹

The adoption of learning outcomes shifts the focus on the learner, the role of a teacher shifts towards that of a facilitator of the learning process. It furthermore recognises that many activities can take place outside the classroom, based on learners’ own independent activities. This approach has influenced significantly the ECTS system transforming it towards an output based tool what we could call “learning outcome based ECTS credits”.

In the framework of ECVET, the learning outcomes constitute the very core of the philosophy. We can even consider that it is not necessary to take into account the curriculum to define the learning outcomes, these being defined related to the job profile and occupational standard only.

Learning outcomes will be related to the qualification framework at a national as well as European level. They offer innovation potential for curricula development. If we conducted a literature survey we might arrive at a wide range of definitions which in substance do not differ significantly. The common denominators could be identified as

³¹ *The EUA Bologna Hand Book, Raabe, Stephen Adam, chapter B 2.3-1, Introducing Bologna Objectives and Tools - An introduction to learning outcomes, p.4*

— Learning outcomes focus on what the learner has achieved – rather than on input-driven plans embedded in the curriculum;

— Learning outcomes focus on what the learner knows and can perform after the respective learning activity.

This common substance is summarised in the definition of learning outcomes published in the CEDEFOP’s “Terminology of European education and training policy” (2008): Learning outcomes are defined as “the set of knowledge, skills and competences an individual has acquired and/or is able to demonstrate after completion of a learning process, either formal, non-formal or informal”.

The reinvigorated focus on learning outcomes creates additional challenges for the design of viable learning outcomes. In order to become prime messengers of information they have to display a profiled specificity. Every single learning outcome becomes relevant and crucially rises in significance.

They have to:

- Be intelligible and specific
- Be expressed in terms of knowledge, skills and competences and fit within the frame of the descriptors of the particular level in the EQF and overarching qualification framework of EHEA (QF-EHEA)
- Refer and relate to quality assurance/ accreditation methodology at national as well as institutional level
- Refer and relate to learning assessment methods
- Communicate to contextual (i.e. within the same programme) learning outcomes in order to express progression and pathways, to describe structure
- Be able to stand alone and communicate to the world outside the programme and society at large, i.e. they have to contain autonomous meaning outside their immediate context

Rethinking the degree programmes through the learning outcomes prism stimulates cooperation with all major stakeholders (educationalists, employers, learners, quality assurance specialists, alumni) and serves as a transparency tool for society at large.

In the framework of vocational education and training, the learners are assessed according to the learning outcomes they achieve. These learning outcomes are complex elements since they are the sum of components which refers to sets of knowledge, skills and competences, of perception and of attitude allowing to hold correctly the function or to perform the task connected to the prepared job. Besides, the learning outcomes are subject to evolution, since they develop themselves inside as well outside the school.

This new approach influenced credit systems. Viable in both the ECTS and ECVET system, learning outcomes offer a mutually intelligible element between the two worlds. Learning outcomes signal the prime information carrier, while workload (ECTS) and the relative significance of a unit of learning outcomes (ECVET) will be of relevance, yet take only secondary importance.

Learning Activities

Learning activities may refer to courses, internships, theses, practical experimentations, on the job training, etc. They represent a key concept in the framework of the Be-TWIN project since the project's aim is to enable a dialogue between vocational education and training and higher education.

In the framework of vocational education and training, and more specifically in apprenticeship, the learners usually spend a significant part of the training time outside of the school, since they are employed in a company. Some higher education institutions involve practical placement as part of their curricula as well. It is thus necessary to take into account, in the evaluations of the learner's skill level, the activities realised in the company and the knowledge, skills and competences deployed to adapt herself/himself to the situation. Learning activities thus take place in various contexts: the training centre, the company and the socio-cultural framework of the practical training. These three places relate to three kinds of activities: the activities taking place in formal learning situations (at school), the activities taking place in non-formal learning situations (in the company) and the activities taking place in informal learning situations (in the daily life).

The formal learning activities

The formal learning activities refer to the learning gained in a training institution or within a prescribed curriculum at a higher education institution with learning objectives, pedagogical and educational strategies clearly defined. Since the objectives and the means are formalised, they allow a formal evaluation.

The non-formal learning activities

The non-formal learning activities refer to a learning situation, which is not organised by a training centre/educational institution. However, similar to the formal learning activities, it is structured in terms of objectives, of time or of resources. This structure is marked out, most of the time, by pedagogic tools co-defined by training authorities and professionals. The tutor in the company defines the objectives and the means in connection with the professional

situation and the training centre. The non formal learning activity is intentional in the way that the learner is conscious to improve his/her skills by performing those tasks.

The informal learning activities

The informal learning activities are generally acquired through the activities of everyday life connected to work, to the family or to leisure activities. Unlike the two above-mentioned ways of learning, it is not structured in terms of objectives, of time/duration or of resources. It frequently possesses a non intentional nature, i.e. the purpose of the action is not to learn something in particular, the learner thus not necessarily being conscious to have acquired new skills.

A vocational training programme necessarily has to take into account the formal learning activities, but also the learning outcomes gained through work situations (non formal learning) in order to define the expected knowledge, skills and competences to be acquired to obtain the qualification.

This also holds true for higher education institutions, which may also have to take into account formal learning activities and could assess and validate both informal and non-formal ones.

Underneath the learning outcomes layer, ECTS and ECVET carry different secondary layers of information. In ECTS, credit points denote the temporal investment made in order to achieve defined learning outcomes, i.e. they can be seen as a measurement of a volume of learning, commonly referred to as workload. In so doing they further indicate more specific learning pathways. As stated in the previous section the ECTS also specifies the relative weight of the learning activity within the degree programme. In ECVET credits points denote the significance of a certain unit of learning outcomes within the overall qualification.

This assumption also offers the possibility that if an individual can demonstrate that he/she performs on a given level without having taken part in formal learning activities (but through informal or non-formal learning), that person is entitled having his/her outcomes assessed to receive the same number of credits and any privileges that might come with them.

The proposed methodology subscribes to the approach that neither time invested into achieving predefined learning outcomes, i.e. the workload, nor their relative significance, nor their packaging (in courses, modules, etc.) should be used to translate between both systems. This methodology relies on sound learning outcomes, quality assured within the national and/or institutional system, and connected to adequate assessment methods.

The suggested Be-TWIN matrix acts as the basis for any articulation between ECTS and ECVET. It can be seen both as a transparency tool and a translation device in that it asks qualifications from both systems to apply identical and thus comparable information parameters. As a common interface it emphasises learning outcomes and the systems' secondary layers of information. It is important to stress that this methodology does not propose a completely new model of curriculum development or the revision of the presentation of qualifications in general.

A simplified model – the matrix step-by-step

The model can be used from different entry points and is compatible with the specificities of higher education and of vocational education and training. The only pre-requisite is to start with an existing qualification, possibly referenced to an EQF/QF-EHEA level (depending whether the national framework has been referenced to the EQF already).

The matrix is a double entry table, which enables to better depict and present a given qualification, by detailing the learning outcomes and the learning activities (curriculum).

		LEARNING ACTIVITIES						ECVET credit points
		L1	L2	L3	L4	L5	Ln	
UNITS OF LEARNING OUTCOMES	U1							...
	L01	×		×	×			
	L02			×				
	L03		×		×			
	U2							...
	L04		×					
	L05	×			×			
	L06							
	U3							...
	L07	×	×		×			
	L08							
	L09			×				
	U4							...
L010	×			×				
L011								
L012								
Un	
ECTS credit points			Total

HOW TO FILL IN THE TABLE: 4 STEPS

Move your mouse over the icons to reveal the corresponding information

Potential Usages

The credit usage depends on the motivation of the institution involved to use the matrix. Thus, three potential usages of the matrix have been identified so far:

▶ If it is to reshape **the training offer and make it more transparent for the learners** in the case of a university or a higher educational institution, then the right hand side column with the ECVET points will not need to be filled in; only the bottom line with the ECTS points will be completed. By doing the exercise, the university will have gained clarity and will furthermore have connected its educational offer (courses, modules and other learning activities) with precisely defined learning outcomes. Also, if the institution concerned seeks to diversify its audience by recruiting individuals with various backgrounds (workers wishing to study anew, learners coming from VET), it will be easier to identify which learning outcomes have already been achieved and eventually to decide to exempt him/her from several courses tied to these learning outcomes. Here, it is obvious that the shift towards learning outcomes makes it easier to recognise prior learning than only taking into account the curriculum and courses validated in a prior learning context, without questioning the usage of ECTS in universities.

▶ A second potential usage of the matrix can be for a VET provider **to better connect the identified job profile and the proposed qualification** to the training offer and pedagogical investment. The VET provider will use the matrix in order to identify what, in the existing curriculum, contributes to the expected learning outcomes to be achieved and, in some cases, review its training offer by changing the proposed learning activities when having completed the matrix. This might be the case, for instance, if some learning activities appear to be of no relevance for contributing to the learning outcomes. The VET provider will use the pre-requisites of ECVET, including consulting the economic sector relevant for the given qualification, in order to fill in the learning outcomes part of the grid and to attach points to the units of learning outcomes taking into account their relative importance within the overall qualification. He will not need to fill in the bottom line of the grid with the ECTS points but will nevertheless fill in the learning activities and reflect on how these contribute to the learning outcomes.

▶ A third potential usage of the matrix will be, in some cases, to fill in both sides of the grid: the ECVET and ECTS. This will be useful in specific contexts identified in the framework of the Be-TWIN project. For instance, VET degrees at higher educational level³², which exist in several national educational systems, would benefit from the matrix by converting their training offer both in ECVET and in ECTS. This would enable these degrees to depict their training offer in accordance with the labour market's needs, based on learning outcomes as specified in ECVET, but also to attribute ECTS points to learning activities to boost the curriculum and be intelligible to the European Higher Education Area. This double allocation of credits would be beneficial for the learners who could better value their gained learning outcomes towards the economic world, and better present their qualification towards the academic world in the case of a vertical mobility for example.

³² E.g. the BTS (Brevet de technicien supérieur) in France or the FdA (Foundation Degree) in the UK.

Practical examples from vocational education and training and higher education

This last part is dedicated to concrete examples aiming at illustrating day to day use of the methodology. Those examples are part of the experimentation planed within Be-TWIN i.e. case studies which will be developed up to the end of 2011.

The case studies intend to illustrate the diverse potentialities of Be-TWIN methodology building on learning outcomes and learning activities in order to enhance transparency, recognition and mobility between VET and HE. They describe individual education or training situations (at institutional level) using the proposed matrix. They sketch the sequence of applying the matrix in a very concise manner, step by step. In so doing they explicitly mention which of the following steps they took at which point (cf. p. 27).



Case Study 1 Foundation Degree in Hospitality Management

Partners

Stratford-upon-Avon College (U.K.)
Ecole de Savignac (France)

Context: The testing is made on the Foundation Degree (FdA) in Hospitality Management and BA (Hons) Hospitality Management, two courses developed by the London School of Hospitality and Tourism at TVU (Thames Valley University) and Stratford upon Avon College. The programmes are run in collaboration with Ecole de Savignac (France). Foundation Degrees are vocational HE awards, designed with employers, which aim to develop technical and work specific skills underpinned by rigorous and broad-based academic learning. With the emphasis on work experience, Foundation Degrees are a two-year route to a degree and are highly valued in the job market. The course is designed either for those already in employment or for school (post 18) and college leavers who do not have a higher education qualification. This innovative course integrates employment skills with academic study and

offers progression from level 3 qualifications in the UK.

The FdA programme is part-time (usually over three, but sometimes two, years, and runs for 3 terms of 11 weeks each year, is based on 2 days of study each week and involves study and assessment in 12 modules, 6 at Level 4 and a further 6 at Level 5.

The BA (Hons) Hospitality Management is a one year top-up programme that has been designed as a progression route for those who have achieved the FdA Hospitality Management or who have relevant alternative qualifications or experience. The course is validated by Thames Valley University and is an extension to the FdA in Hospitality Management.

This is a one year programme, based on 2 days of study a week for 34 weeks; this was originally supported by electronic distance learning material. A considerable amount of independent research and study is needed for successful completion of the programme.

The target groups of the testing are the following

Year 1 FdA Hospitality Management

48 Students aged between 17 and 31

Year 2 FdA Hospitality Management

50 Students aged between 19 and 34

BA Hospitality Management (Top Up)

61 Students aged between 19 and 39

2 Rationale/ aim of the ECVET testing:

— to give more flexibility of recognition for students leaving the course either after year 1 (Level 4) or year 2 (Level 5) in order to follow another qualification outside of the UK credit system.

— to enhance the ability of students outside of the UK credit system to directly join on to either year 2 (Level 5) or year 2 (BA Level 6) taking in to account prior learning.

3 Method used to build units of learning outcomes:

The FdA in Hospitality Management is organised across two levels, 4 and 5 and at each level it is intended that the learner achieve certain learning outcomes. These learning outcomes identify the knowledge, skills and competences that a learner will have at the end of each module.

The units of learning outcomes therefore already exist, and are in place – classified within the UK HE sector as ‘modules’. The number of learning outcomes in each ‘module’ will differ, although there is not any science involved in their development.

The learning outcomes were designed by specialist academic staff with input from industry to ensure vocational relevance. On a regular basis teams from the college and validating university update modules to reflect current industry expectations and practices.

4 Method used to identify the Learning Activities:

Each unit of learning outcomes has either two or three assessments built around the learning outcomes stipulated; these assessments can be in the form of reports, essays, discussion papers, examinations or oral presentations. Learning outcomes are usually only assessed once thus avoiding over-assessment of the students. These assessments are reviewed on a yearly basis and developed according to the feedback from students and lecturers (and work-based mentors and employers).

The methodology of allocating ECVET points within the UK system, units of learning outcomes and modules i.e. learning activities are effectively the same thing. Learning activities are planned according to the expected learning outcome and the assessment methodology. Delivery teams will utilise a range of learning activities that are appropriate for the learner and the vocational area such as; lectures, demonstrations, group exercises, practical activities, real work-based learning etc.

5 Method used to allocate credits:

Both the FdA and BA Hospitality Management programmes were designed and organised by Thames Valley University (TVU), and as part of the UK system each module was designed as a set of learning outcomes. Each module is taught through lectures and lessons which contribute to the students’ submission of two/ three assessments (per module) to demonstrate application and level of success in achieving the

learning outcomes.

Each module is worth 20 UK credit points, which have been attributed 10 ECTS (the workload for each module is given as 200 hours). Therefore it has been decided that it would be better to use the UK credit points as a reference point as opposed to ECTS.

Each module within the BA and FdA has learning outcomes as standard – these have been in place since the programme started in 2003. All learning outcomes are decided by Thames Valley University and can only be changed by going through a rigorous administration process.

Due to the modules being designed by different lecturers and parts of the university there is not a standard number of learning outcomes for each module: these range from 4 – 12

The assessments for each module are based on the learning outcomes and the learning outcomes are allocated to assessment to ensure that all have been covered: e.g. A1 covers learning outcomes 1, 2, 4, 5 and A2 covers learning outcomes 1, 3 and 6.

The methodology for the application of ECVET credit points has been based on the perceived necessity for employment, and based on this, ECVET points have been accredited. The decision to move away from allocating points to individual learning outcomes arose because of the repercussions changes in the learning outcomes may create: learning outcomes can be expressed with the potential for a higher or lower level descriptor being used, thus changing the overall point allocation, possibly resulting in the figure of 60 ECVET not being met.

Therefore each unit of learning outcomes was identified in terms of their importance with a rating from 1 (most important) to 3 (least important) at the level of study and related employment opportunities. Calculating the ECVET points was done through identifying the values to add up to 60 points in total on a sliding scale. This was carried out across each of the 3 years.

This was also based on conversations with other lecturers and their knowledge of the hospitality industry through contact with employers and their own previous profession-related management experience.

Please use the Zoom-Function of your Acrobat Reader/Pdf Viewer for a closer look (go to the [annexes](#) for the printable version).

FOUNDATION DEGREE IN HOSPITALITY MANAGEMENT (YEAR 1 - LEVEL 4)		LEARNING ACTIVITIES						ECVET CREDIT POINTS
		L1 Food and Beverage Operations	L2 Personal Development 1	L3 Introduction to Hospitality Business Finance	L4 Room Divisions Operations	L5 Customer Service	E6 Managing people	
UNITS OF LEARNING OUTCOMES	FOOD AND BEVERAGE OPERATION							1
	1. Understand the planning, implementation & control processes involved in designing food production & delivery systems							12
	2. Demonstrate knowledge and operational skills applicable to a range of food and beverage environments							
	3. Demonstrate an understanding of the importance of the financial contribution to the sale of space.							
	4. Understand the various methods used to maximise revenues in food and beverage operations.							
	5. Understand the need to work safely and hygienically within the food production environment.							
	6. Explain the planning and organisation of production and delivery systems.							
	PERSONAL DEVELOPMENT 1							3
	1. Apply the appropriate written communication techniques when analysing information.							6
	2. Access and demonstrate the use of relevant resources.							
	3. Develop existing skills and acquire new competencies for the hospitality environment.							
	4. Obtain transferable skills necessary for employment.							
5. Present independent research.								
INTRODUCTION TO HOSPITALITY BUSINESS FINANCE							2	
1. Demonstrate a knowledge & understanding of the theories, concepts & principles of financial management in hospitality							9	
2. Examine and evaluate financial documents within your own working environment								
3. Investigate a range of case study material to compare and contrast monitoring and controlling of finance in different areas of hospitality								
4. Prepare & present cash-flow, profit and loss & balance sheets in widely used formats using appropriate financial terminology								
5. Investigate and evaluate skills and methodology which impact on financial decision-making								
ROOMS DIVISION OPERATIONS							1	
1. Understand customer needs and how these needs can be met							12	
2. Interpret a range of information required for day-to-day rooms division operations								
3. Demonstrate professional skills relevant to rooms operations								
4. Demonstrate an understanding of the important financial contribution of the rooms division to the overall revenues generated								
5. Identify and understand the law relevant to rooms division operations								
6. Demonstrate an understanding of the function and processes of maintenance management								
CUSTOMER SERVICE							1	
1. Evaluate what is required for effective customer service							12	
2. Identify the effectiveness of a mission statement								
3. Analyse and evaluate the customer services related practices and procedures								
4. Evaluate an appropriate range of communication skills in response to customer needs								
5. Identify causes of service quality downfalls								
6. Compare and contrast customer training in relation to practice								
7. Identify and analyse existing customer service practices.								
8. Evaluate and recommend further training required for the process of increased sales and customer/staff retention.								
MANAGING PEOPLE							2	
1. Identify organisation theories and explain their relevance to the hospitality environment today							9	
2. Investigate management behaviour and leadership approaches, attributes and skills.								
3. Recognise the contribution of motivation to the management of people.								
4. Analyse the role of teamwork and communication in the effective management of people within hospitality								
5. Identify practical ways of improving motivation, communication and teamwork within an organisation								
UK CREDIT POINTS		20	20	20	20	20	20	60

FOUNDATION DEGREE IN HOSPITALITY MANAGEMENT (YEAR 2 - LEVEL 5)		LEARNING ACTIVITIES						ECVET CREDIT POINTS	
		L1 Human Resource Management	L2 Operations Management	L3 Marketing	L4 Business Planning	L5 Personal Development 2	L6 Licensed Premises Management		L6 Rooms Division Management
UNITS OF LEARNING OUTCOMES	HUMAN RESOURCES MANAGEMENT								2
	1. Investigate, analyse and evaluate the principles and conventions associated with human resource management								10
	2. Demonstrate an understanding of contemporary theory surrounding the management of change								
	3. Demonstrate knowledge and understanding of effective and ethical recruitment and selection procedures								
	4. Analyse the varying strategies of training and development within hospitality								
	5. Explain the purpose of performance management and procedures for providing support in specific individual circumstances								
	6. Identify and explain current employment legislation associated with HRM in the hospitality industry								
	OPERATIONS MANAGEMENT								1
	1. Identify the range of activities and systems requiring management level control in the hospitality industry.								14
	2. Investigate and compare management styles and theories, and then relate and apply them to the hospitality industry.								
	3. Review and evaluate operational activities in order to identify the need for improvement, and then recommend resolutions to problems.								
	4. Explore and compare manual and electronic information systems used in hospitality management.								
5. Demonstrate an understanding of how the concept of quality control can be integrated into hospitality organisational control									
6. Compare planned with actual performance and analyse the variances									
MARKETING								2	
1. Outline the fundamentals of hospitality marketing								10	
2. Identify information requirements for marketing management, planning and control									
3. Have knowledge of the means of acquiring this information, its costs and limitations									
4. Applying criteria which determine the development of the marketing mix for given situations in order to achieve specific objectives									
5. Formulate short and medium term marketing plans in a structured manner applicable to practical situations									
6. Appreciate the product life cycle, the need for new products development in view of political, environmental, social and technological change									
7. Assess differences in buyer behaviour and market segments - culture, attitudes and perception									
BUSINESS PLANNING								3	
1. Research and analyse the impact of the environment on the business								8	
2. Design an operational establishment that satisfies market demand									
3. Work effectively as a 'sole trader' and present an appropriate business plan within identified constraints									
4. Display a critical insight into the significance of the industry and communicate key points regarding selection of the business and the key market									
PERSONAL DEVELOPMENT 2								3	
1. Demonstrate research and communication skills through an extensive workplace report								8	
2. Assess your own performance and plan your development needs									
3. Appraise the attributes associated with personal effectiveness within the context of management skills									
4. Participate in and evaluate career planning and development									
LICENSED PREMISES MANAGEMENT								2	
1. Outline the general factors affecting the organisation of a range of licensed retail establishments.								10	
2. Provide information relating to health, safety, fire and hygiene standards.									
3. Create the framework for a range of working schedules to cover the responsibilities of staff.									
4. Critically analyse and evaluate the profit and loss account and make recommendations for improvements.									
5. Understand stock control systems.									
6. Investigate the operational standards of a licensed establishment. Complete a full analysis and demonstrate problem-solving techniques									
1. Identify the financial role of the rooms division within the overall operation of the business								10	
2. Evaluate methods used to optimise profitability as applied to a fixed capacity inventory									
3. Identify staffing demands and required skills in respect of the accommodation product									
4. Identify issues arising from facilities management, and the built environment of the rooms division									
5. Explain how industry codes of conduct and legislative issues directly affect procedures within the rooms division									
6. Investigate the operational standards of a licensed establishment. Complete a full analysis and demonstrate problem-solving techniques									
1. As part of a team, plan the production and service operations within the public restaurant.								10	
2. Market a themed restaurant to ensure a customer base.									
3. Develop team-working skills.									
4. Work to specific deadlines.									
5. Present a report that evaluates a themed event against set criteria.									
6. Analyse food and beverage data, reformat the information and offer solution									
ECTS CREDIT POINTS		10	10	10	10	10	10	60	

BA (HONS) HOSPITALITY MANAGEMENT		LEARNING ACTIVITIES						ECVET CREDIT POINTS
		L1 Information Technology Strategy for Hospitality	L2 Global Marketing for Tourism and Hospitality	L3 Ethics	L4 Dissertation	L5 Strategic Hospitality Management	L6 Consultancy	
UNITS OF LEARNING OUTCOMES	INFORMATION TECHNOLOGY STRATEGY FOR HOSPITALITY							2
	1. Be able to comprehensively and critically analyse, using a range of techniques, key strategies used by service providers.	2						9
	2. Be fully conversant with the applied practical and theoretical processes of developing management strategies.	1						
	3. Examine and evaluate the implications of different strategic approaches from a local, regional, national or global perspective as appropriate.	2						
	4. Propose a coherent and professional strategic IT management solution, including the assessment of the success or failure of those strategies and recommendations for alternative options.	1.5						
	GLOBAL MARKETING FOR TOURISM AND HOSPITALITY							1
	1. Evaluate global marketing problems in Tourism and Hospitality using a range of analytical tools and techniques.	2						12
	2. Critically analyse global marketing strategies and evaluate their competitiveness for sustainable advantage within Hospitality and Tourism.	2						
	3. Analyse and evaluate the impact of culture and consumer behaviour on global marketing communications strategies in Hospitality and Tourism.	2						
	4. Apply and critically evaluate the marketing mix in a global Tourism and Hospitality context.	2						
	ETHICS							1
	1. Examine critically the breadth, diversity and complex nature of the hospitality industry.			1				12
2. Explain strategic decisions within the context of the hospitality industry and formulate appropriate responses to complex scenarios requiring a professional and managerial approach.			1					
3. Discuss the application of business ethics and management of change theories to hospitality company policy and practices.			1					
4. Evaluate and apply appropriate theories and concepts from the generic management areas within a hospitality context.			2					
5. Critically review the reliability, validity and significance of data and have an awareness of the provisional nature of the state of knowledge.			2					
6. Transform complex data, concepts and theories towards a given purpose and create innovative solutions.			1.5					
7. Develop a reasoned argument and challenge assumptions.			1					
8. Access a wide range of resources and information from both academic and industrial sources			1					
9. Initiate a research project relevant to the hospitality context, assemble data and present in a coherent, articulate and professional manner, implementing a professional approach to fieldwork and dealing with industry personnel.			1.5					
10. Communicate in a professional manner in a variety of formats to include detailed and coherent reports, essays, presentations and discussions.			1.5					
11. Work independently with a minimum guidance to use a full range of resources, knowledge and skills to solve complex problems.			1					
12. Critically reflect on learning and develop strategies to meet self-initiated goals.			1					
DISSERTATION							3	
1. Compose a detailed research proposal on a topic relevant to your programme				1.5			6	
2. Identify your research approach within the general framework of research methodology				1				
3. Locate information from a variety of secondary sources				1				
4. Write a critical literature review that deals effectively with relevant concepts/theories/models				1.5				
5. Select and implement appropriate primary data collection methods				1				
6. Analyse quantitative and/or qualitative data and evaluate in relations to models/theories				2				
7. Present a dissertation that effectively communicates your research findings				1.5				
STRATEGIC HOSPITALITY MANAGEMENT							1	
1. Analyse and explain the role and responsibilities of the general manager in the implementation of company policies at local level.					2		12	
2. Examine the accountability and evaluate the effective use of business resources at the level of the general manager within a single unit, recognising and reconciling contradictions and demonstrating skill in defending and communicating solutions.					2			
3. Investigate theories of strategic management and demonstrate their application using decision making models to evaluate their appropriateness within a variety of hospitality contexts.					1			
4. Examine critically key strategies used by hospitality providers (owner managed through to international corporations) to grow their business.					1			
5. Investigate the implications of strategic approaches at functional, business and corporate levels within business situations, predict potential problems and formulate and defend appropriate solutions.					2			
6. Consider the ethical frameworks that impact on the drawing up of business policies; examine existing policies drawn from within the hospitality industry exposing the strengths and weaknesses against ethical business criteria.					1			
7. Identify areas of strategic opportunity specific to a hospitality company; design, present and evaluate a strategic plan considering policy and implementation issues raised.								
8. Analyse international growth patterns predicting the impact of current trends on future strategic plans and speculate on future product developments.								
CONSULTANCY							2	
1. Work closely with a corporate client to the highest professional standards.						1	9	
2. Design appropriate frameworks to meet clients' needs and investigate possible alternatives.						1.5		
3. Integrate theoretical principles to demonstrate how these underpin the analysis of the problems.						1		
4. Formulate practical solutions to meet the brief given by the client - this to take the form of a critical report.						1.5		
5. Effectively communicate an analysis of the client's requirements and obtain constructive feedback on performance.						1.5		
6. Access a wide range of resources and information from both academic and industrial sources						1		
ECTS CREDIT POINTS		20	20	20	20	20	20	60



Case Study 2

Master's degree programme Meteorology and Climatology

In higher education it can also serve to transform the ECTS credits subscribed to learning activities into ECTS credits subscribed to learning outcomes. It builds the description of qualification in both - higher education and VET systems on the same methodological basis and the results in both systems could be compared more easily. ECTS credits get new dimension closer to the definition of ECVET.*

Moreover it can build on previous successful curricula, help to rethink what is taught, what a student learns and in which courses. Thus it can express more explicitly what the graduate will know, understand and be able to perform.

Partners

Charles University, Prague, Czech Republic

1 Context: The Master's degree programme Meteorology and Climatology is provided by the Faculty of Mathematics and Physics of the Charles University in Prague. It is consequent to the Bachelor's degree programme General Physics provided by the same faculty. The programme is open for all graduates of a Bachelor's degree programme who graduate with a minimum of 180 ECTS credits and who successfully meet the entrance requirements.

Basic data

National Qualification Framework level: **7**³³
European Qualification Framework level: **7**³⁴
Overarching Qualification Framework for EHEA: **2nd cycle**³⁵

Academic degree awarded: **Magistr**

Standard duration:

2 standard years;
assigned 120 ECTS credits

Next to the theoretical basis the graduates can study in three more specialised streams – 1) *meteorological service and weather forecasting*; 2) *climatology, climate changes and modelling of climate system*; 3) *Earth pollution problems*. Thus the degree programme can provide a good base for further advanced studies e.g. in a doctoral degree programme as well as for very practical applications. The profile is tuned by students themselves by the ratio of theoretically and practically oriented learning outcomes. The possibilities, how to combine learning outcomes, are described below.

2 Rationale/Aim of the Testing the Matrix:

1. The added value:

- The matrix will give information to a student about his/her possibilities during studies and more flexibility in the curriculum.
- The matrix can serve for evaluation of the degree programme (content, organisation) and serve the programme improvement. Nowadays a student has to subscribe to (or elect to follow) the compulsory learning activities. The vision is that in future a student will not have to sign for all compulsory learning activities from the curriculum, only for those which contribute to compulsory learning outcomes or which she/he opted for via his/her combination of the specialised track.

2. The further possibility of the use of the matrix is for validation of prior learning. If somebody comes from another institution and he/she is able

³³ The National Qualification Framework has not been approved yet, this is only referencing to the draft.

³⁴ Could be stated only when the referencing process is successfully completed.

³⁵ Could be stated only when the self-certification procedure is successfully completed.

* The use of matrix could thus be in line with a possible future development which is described in the CEDEFOP study, "Linking credit systems and qualifications frameworks, 2010". It goes in line with suggested options 2 and 3 for credit systems On p. 10 of "Selected results" of this study written by Isabelle le Mouillour we can read: "Based on those enablers, considering uncertainties and commitments at European level until 2020, three options for the development of credit systems and qualifications frameworks at European level have been identified:

Option 1 - Status quo

Option 2 - Two instruments: There is a single set of European credit arrangements guidelines and a single qualifications framework. **The re-branding of the instrument is more problematic than the conceptual integration. The concept of credit evolves closer to the ECVET approach of understanding credit as assessed learning rather than as a measure of volume...**

Option 3 - All in one: There is a single European Credit and Qualifications Framework (ECQF). In terms of concepts this means that the principles for credit systems (both the measure of volume and possibilities for accumulation, transfer and recognition credit) are embedded in the European qualifications meta-framework. The framework can recommend use of units/modules (as ECVET and ECTS do) but cannot require it across all national qualifications systems.....".

It matches more to option 2, however, it is not contradictory to developments in option 3.

to bring his/her portfolio in the form of learning outcomes it would be possible to evaluate which of his/her learning outcomes could be recognised (fully or partially) and which learning activities he/she has to sign for successful completion of the degree programme.

3 Learning Outcomes: There were **11 learning outcomes**. In the concept of vocational education and ECVET system, these learning outcomes could be considered “*units of learning outcomes*”.

KNOWLEDGE AND UNDERSTANDING

1 KUBT – Theoretical background concerning structure and dynamics of the Earth atmosphere (Knowledge and understanding – theoretical basis)

Graduates will demonstrate full understanding of atmospheric processes in connection with atmospheric statics, dynamics and thermodynamics, atmospheric radiation transfer, propagation of electromagnetic waves in atmosphere etc.

Graduates will display a deep understanding of interactions and feedbacks between these processes, esp. in connections with interpretation of the Earth atmosphere as complicated non-linear dynamic system.

Graduates will master this field of knowledge in that way that they will be able to continue both in studies of a wide range of practical applications as well as in advanced theoretical studies.

2 KUAT - Advanced theoretical knowledge and understanding

Graduates will widen their theoretical knowledge and gain advanced theoretical background knowledge for further studies in a doctoral degree programme or for applied research activities.

3 KU1 - Diagnosis and prognosis of atmospheric processes

Graduates will master the physical and mathematical methods needed for analyses of atmospheric states or for meteorological forecasting.

Graduates will understand connected methods of numerical mathematics and mathematical statistics to study in details main sorts of numerical weather forecast models and parameterizations of physical processes taken into account in model equations (esp. radiation processes, transports of momentum,

heat and moisture, turbulence and convection effects, phase transformations of water, heat and moisture exchange between the air and surface).

Graduates will be able to formulate model equations and interpret solutions.

Graduates will obtain basic knowledge in connection with observation and measurement of meteorological elements and atmospheric characteristics on the ground and aerological meteorological stations, and in connection with knowledge concerning radar and satellite measurement methods.

4 KU2 - Theory of climate system, methods in climatology

Graduates will become familiar with structure and dynamics of climate system and its components (atmosphere, hydrosphere, cryosphere, lithosphere, biosphere, near part of interplanetary space) and with the wide complex of connected processes.

Graduates will understand these processes in their corresponding interactions and positive or negative feedbacks.

Graduates will master in details problems connected with climate changes and their extraterrestrial, terrestrial and anthropogeneous causes.

Graduates will obtain deep knowledge in the field of climatologic methods for data collection, their processing and interpretation.

5 KU3 - Sources, transportation and transformations of air pollution compounds

Graduates will have deep understanding of atmospheric processes regarding their effects on transportation, spreading and transformations of air pollution compounds in atmosphere (wind field, interactions of atmospheric flow with surface, atmospheric turbulence and convection, radiation effects, dry and wet deposition of air pollution compounds, atmospheric chemistry transformations).

Graduates will obtain knowledge of historical development of air pollution problems, of main sorts of air pollution sources and compounds.

COMPETENCES

6 C1 - Forecast methods and models in meteorology, their applications and outputs

Graduates will be able to apply knowledge of atmospheric processes in the field of meteorological forecasting methods based on using of numerical weather forecast models, statistical models and

advanced procedures of IT technologies.
 Graduates will be able to formulate and apply outputs of these models and methods.
 Graduates will master procedures of obtaining meteorological data collections, their creation, archiving and processing.
 Graduates will be able to prepare data collections for model outputs (methods of objective analysis etc.).

7 C2 - Modelling of climate system, evaluation of climate conditions and climate changes

On the bases of understanding the structure and dynamics of a/the climate system and its components, graduates will be able to create and interpret model studies in connection with climate changes and their impact on the environment and national economy

Graduates will be able to evaluate climate data and their extensive collections, to analyze time trends of climate elements and characteristics.

8 C3 - Modelling, monitoring and evaluation of air pollution

Graduates will master practical applications and evaluations in connection with the transportation, spreading and transformations of air pollution compounds,

Graduates will obtain abilities for applications of Lagrange and Euler numerical models for air pollution transport,

Graduates will understand the bases of physical modelling in aerodynamical tunnels,

Graduates will be able to critically evaluate model outputs in connection with the results of measurements of air pollution

Graduates will master basic methods of air pollution monitoring

Graduates will become proficient for advanced activities in the field of atmospheric cleanness protection.

SOFT SKILLS

9 SS1 - Making judgements, capability of critical analysis, evaluation and synthesis of knowledge

Graduates will have the ability to integrate knowledge and handle complex subject issues, and formulate judgments with incomplete or limited information, including reflection on social and ethical responsibilities linked to the application of their knowledge and judgments;
 Graduates will be able to formulate their own views on the issues.

Graduates will be able to develop new knowledge and procedures and to integrate knowledge from different fields.

10 SS2 - Communication, ability to present, organisational skills

Graduates are able to communicate their conclusions and the knowledge to specialist and nonspecialist audiences clearly and unambiguously in one foreign language.

Graduates are able to manage professional/specialist activities and/or projects including strategic planning.

Graduates are able to lead groups of people and take responsibility for their decisions.

11 SS3 - Lifelong learning capability

Graduates will have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.

Graduates are able to lead and manage their peers to continue learning where appropriate/needed.

Learning outcomes 1, 2-partially, 9, 10, 11 are compulsory; all students have to fulfil them. **From the remaining learning outcomes at least two of the defined couples have to be fulfilled**

Learning outcomes **3** and **6**, **4** and **7**, **5** and **8**

4 Method used to identify Learning Activities: There is a curriculum consisting of 44 learning activities

	LEARNING ACTIVITIES	ECTS credits
1.	Synoptic meteorology	3
2.	Boundary layer physics	4
3.	Analysis of weather charts	6
4.	Methods of numerical mathematics I	3
5.	Methods of numerical mathematics II	6
6.	Objective analysis of meteorological elements fields	6
7.	Special climatological seminary	4
8.	Distant observations and detect methods in meteorology I	5
9.	Physics of clouds and precipitation	3
10.	Synoptic interpretation of diagnostic and prognostic fields	6
11.	Preparing of diploma thesis I	6
12.	Statistical methods in meteorology and climatology	6
13.	Propagation of electromagnetic and acoustic waves in atmosphere	4
14.	Regional climatology and climatography of the Czech Republic	6
15.	Wave movement and atmospheric energetic	4
16.	Turbulence in atmosphere	4
17.	Dynamic forecasting methods	7
18.	Prognostic models for weather forecasting	3
19.	Practical Linux	4
20.	Stratosphere	3
21.	Numerical solution of prognostic models equations	3
22.	Methods for elaboration of time data series	5
23.	Applied climatology I	3
24.	Meteorological computer seminary	4
25.	Oceans in climate system	3
26.	Aerosol engineering	3
27.	Atmospheric chemistry	3
28.	Special meteorological seminary I	4
29.	Special meteorological seminary II	4
30.	Preparing of diploma thesis II	9
31.	Preparing of diploma thesis III	15
32.	Distant observations and detect methods in meteorology II	5
33.	Special seminary of numerical models I	3
34.	Special seminary of numerical models II	3
35.	Electrical phenomena in atmosphere	3
36.	Spreading of air pollution compounds in atmosphere	3
37.	Mesoscale atmospheric processes	4
38.	Mathematical modelling of cloud and precipitation processes in atmosphere	3
39.	Numerical solution of flowing	5
40.	Procedures of modelling for numerical weather forecasts	3
41.	Applied climatology II	3
42.	Project seminary I	6
43.	Project seminary II	6
44.	Special chapters from geophysical hydrodynamics	3

A special category in the curriculum is the thesis. It is compulsory and the number of the ECTS credits subscribed to it is 30. See the learning activities **11**, **30** and **31**.

5 Method used to allocate credits: The learning activities have their ECTS credits value. There are 199 ECTS credits subscribed to this degree programme. Out of 199 ECTS credits subscribed to learning activities, a minimum of 108 ECTS credits have to be met through this curriculum. 120 ECTS credits (minimum) have to be fulfilled for successful graduation in the degree programme. **The 12 credits can be met via this curriculum or via the learning activities selected from any programme at the University or the partner university (mobility).**

How the matrix was used:

1. Depict the qualification by filling in the grid with the learning outcomes:

The 11 learning outcomes were put into the matrix vertically. The last four columns represent:

— **The sum of ECTS credits subscribed to all learning activities without diploma thesis** (white) – compulsory or optional, together there are 169;

— **The sum of ECTS credits subscribed to all learning activities devoted to diploma thesis** (blue). As mentioned above the total is 30 ECTS. These credits will belong to several learning outcomes; it will be specified in the individual student's assignment of the diploma thesis according to his/her track/specialised learning outcomes and his/her choice of the topic of thesis. The only compulsory part for all graduates is to gain the soft skills (or elements) which have the value of 7 ECTS credits;

— **The sum of the credits which have to be gained as a minimum for the graduate to fulfil the conditions of the respective learning outcome** (the last column - red).

2. Depict the qualification by filling in the grid with the associated learning activities:

The learning activities were put into matrix horizontally. They are compulsory or optional; this is visible in the last line. For immediate visibility the compulsory learning activities are coloured orange, the optional green, those compulsory but belonging to the thesis are coloured blue. The thesis is divided into three learning activities: no. 11. *Preparing of diploma*

thesis I, no. 30. Preparing of diploma theses II and no. 31. Preparing of diploma theses III. The ECTS credits subscribed to each of the learning activities are in the second line from bottom.

3. Cross which learning activities contribute to each learning outcome in order to identify the overlapping of the learning pathway and the outputs of the qualification described in learning outcomes and Allocate the credit points to either the units of learning outcomes (ECVET points) or the learning activities (ECTS points) or to both (ECVET AND ECTS).

The most challenging part was to correlate ("rastr") the existing learning activities and their individual credit value with the learning outcomes, i.e. to put a given number of ECTS credits into each box at the intersection of the respective learning outcome and the learning activity. If the learning activities were not relevant for the learning outcome, the particular file (cross of the learning activity and learning outcome) was not filled – remained empty.

Any of the learning activities will be described by several learning outcomes (further *LA-sub outcomes*). The concrete numbers in the respective column thus reflect the workload of an average student necessary to fulfil the particular *LA-sub outcomes*.³⁶

Two illustrative examples: The learning activity 1 *Synoptic meteorology* (3 ECTS credits) will be described by two *LA-sub outcomes*; one having the value of 1 ECTS credit and specifying the *LA-sub- outcome* for learning outcome 1) - KUTB; the second one having the value of 2 ECTS credits and specifying the *LA-sub- outcome* for learning outcome 3) - KU1. The other boxes in this column stay empty.

Similarly the learning activity 12 *Statistical methods in meteorology and climatology* (6 ECTS credits) will have four *LA- sub-outcomes* contributing to four learning outcomes: 2)-KUAT (2 ECTS credits), 6)-C1 (1 ECTS credit), 7)-C2 (2 ECTS credits), 8)-C3 (1 ECTS credit).

³⁶ The *LA-sub-outcomes* will further concretise the knowledge, skills and competences of the individual graduate. In the given time it was not possible to introduce full description, incl. the *LA-sub-outcomes*.

LEARNING OUTCOMES/
LEARNING ACTIVITIES MATRIX

Please use the Zoom-Function of your Acrobat Reader/Pdf Viewer for a closer look.

		LEARNING ACTIVITIES (LA)																																												TOTAL MINUS THESIS ECTS		TOTAL THESIS		MIN ECTS REQ				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44									
LEARNING OUTCOMES (LOS)	KUBT	1	2	2	4					2																																						11	11					
	KUAT											2	3		4	1				3																		3		1							3	20	5					
	KU1	2		2	1	2	2		4	1	3		1			4				1																2				3								28	20					
	KU2													6								1		3																				1				11	10					
	KU3		2									5				2										3	3													3		2						15	10					
	C1			4			4		1		3		1				3	3	1		2			2					1	1					3	3	3			1	2		3		1	1		43	20					
	C2							3					2							1		5	2	1					1	1													2	1	1			20	10					
	C3												1			1							1							1	1										3				1	1			11	10				
	SS1							1																																					1	1			3	2	4			
	SS2																				1											1	1														1	1			5	2	4	
	SS3												1																																			1	1			2	3	4
	ECTS	3	4	6	3	6	6	4	5	3	6	6	6	4	6	4	4	4	7	3	4	3	3	3	5	3	4	3	3	3	3	4	4	9	15	5	3	3	3	3	4	3	5	3	3	6	6	3	169	30	X			
		Co	Co	Co	Co	Co	Co	Co	Co	Co	Co	Co	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Co	Co	Co	Co	Co	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt				

Co = Compulsory
Opt = Optional

1 Context

The testing is made on the Brevet de technicien supérieur (BTS) Europlastic in France, a vocational qualification at EQF Level 5 – Higher Education. It is a 2-years programme implemented as a National Diploma of the Ministry (national examination and national recognition) but the main contents have been developed at European level (the diploma was created within the framework of the European Leonardo da Vinci program, associating companies and training experts from different EU countries). The training is delivered in several training centres in France (full time or apprenticeship) also in charge of the small part of the examination called CCF.

The institutions involved in the test are:
for France:

- *Fédération de la plasturgie* (Plastics Industry Federation) which gathers 1,500 French companies. Its main missions are to define the professional guidelines and to provide initial and continuing training in the plastics sector. Every year 2,100 students and 600 apprentices are trained in its 50 training centres.
- *Centre des Formations Industrielles*, training center for apprenticeship managed by the CCIP.
- *Ministère de l'éducation nationale* as competent institution

The partner for the mobility scheme is BASF training center (world's leading chemical company with about 97,000 employees).

The main objective of the test is to implement 2 common modules:

- one in France with the Centre des Formations Industrielles on plastics converters training (German group will learn about techniques to convert plastic)
- one in Germany with the *BASF training centre* on transversal training (French group will learn about Communication and language competences)

Both modules should be validated and recognised in the national training.

The target groups are 12 apprentices from the CFI aged between 19 to 26 and 12 apprentices from the BASF training centre aged between 17 to 21.

2 Rationale/aim of the ECVET testing

1. to reshape the training offer and make it more transparent towards the students
2. for a VET provider wishing to better connect the identified job profile tied to its proposed qualification on the one hand to the training offer and pedagogical investment on the other hand
3. in specific contexts identified in the framework of the Be-TWIN project to fill in both sides of the grid: the ECVET and ECTS.

3 Method used to build units of LOs

The units of LOs were already identified in the qualification standards (common European standards), thus it was used in the same term to be relevant with the standards. These units of LOs were built in agreement with the competent authorities representing pedagogical institutions (French Ministry of Education and Greek organisation in charge of the VET qualifications in Greece under the supervision of the Greek Ministry of Education), training centers (Belgium, Italian, Polish and French) and the social partners representing employers (*Fédération de la plasturgie* at the French level and European Plastics Converters at the European level) and employees (French committee included different social partners representing salaries, teachers, students...).

4 Method used to identify the Learning Activities

The learning activities were identified on the French Europlastic qualification standards (subsidiary part of the diploma) according to the assessment process and the exams planned at national level by the competent authority (French Ministry of Education) and the social partners.

5 Method used to allocate credits

The method used to allocate ECTS and ECVET points has been the following:

ECTS

Based on 120 credit points for 2 years, ECTS points calculated on the workload (number of hours + personal work + work placement in company)

$$X = \frac{\text{workload}}{2098} * 120$$

		LEARNING ACTIVITIES													
		Français	Anglais	Mathématiques	Physique	Chimie	Communication Animation	Mise en Oeuvre	Qualité Maintenance	Organiser la production	Optimiser la matière	Optimiser le procédé	Dimension économique	PPCI *	Total
Schedule training in hours	1st year	68	85	68	51	85	34	170	102	34	85	323	17	0	1122
	2nd year	58	72	58	44	58	14	58	87	29	87	247	29	135	976
	Total	126	157	126	91	143	48	228	189	63	172	569	46	140	2098
ECTS credits points		7	9	7	5	8	3	13	11	4	10	32	3	8	120

ECVET

ECVET credit points calculated according to the French regulations for BTS Diploma: on the basis of the Evaluation weight defined for each Unit of Learning outcomes

		General culture & expression			English		Mathematics	Physics/ Chemical	Produce in plastics processing			Optimize in plastics processing	Innovate in plastics processing	Total
EUROPEAN STANDARD	Unit learning outcomes	U 1			U 2		U 3.1 *	U 3.2 *	U 4			U 5	U 6	
	LEARNING OUTCOMES	C1 - To organise production							✘			✘		
		C2 - To lead the production							✘			✘		
		C3 - To ensure production quality							✘			✘		
		C4 - To improve and innovate							✘			✘	✘	
		C5 - To manage and to lead							✘					
		C6 - To communicate			✘		✘		✘				✘	
FRENCH STANDARD	Evaluation	E.1.1 Appréhender et réaliser	E.1.2 Appréhender et réaliser	E.1.3 Communiquer oralement	E.2.1 Compréhension orale	E.2.2 Expression orale	E.3.1 Mathématiques	E.3.2 Sciences physiques	E.4.1 Conduire	E.4.2 Manager - animer	E.4.5 Organiser - gérer - assurer la qualité	E.5 Optimiser en plasturgie	E.6 PPCI	12 evaluations
	Evaluation	E 1			E 2		E 3.1	E 3.2	E 4			E 5	E 6	6
	Evaluation weight	2			2		1,5	3,5	7			6	5	27
	ECVET credit points	3	3	3	4,5	4,5	7	15	9	4	18	27	22	120

FRENCH STANDARD	ECVET CREDIT POINTS		9	9	7	15	31			27			22	120		
	EVALUATION	E 1.1 3	E 2.1 4.5		E 3.1	E 3.2	E 4.1 9			E 5	E 6	12				
		E 1.2 3	E 2.2 4.5				E 4.2 4									
		E 1.3 3	E 4.3 18													
EVALUATION	E 1	E 2	E 3.1	E 3.2	E 4			E 5			E 6	6				
EUROPEAN STANDARD	LEARNING OUTCOMES	C1 - To organise production						✗			✗			✗		
		C2 - To lead the production						✗			✗					
		C3 - To ensure production quality						✗			✗					
		C4 - To improve and innovate						✗			✗			✗		
		C5 - To manage and to lead						✗								
		C6 - To communicate		✗	✗			✗						✗		
	UNIT LEARNING OUTCOMES		U1	U2	U3.1*	U3.2*	U4			U5			U6	6		
FRENCH STANDARD	LEARNING ACTIVITIES		Français	Communication Animation	Anglais	Mathématiques	Physique	Chimie	Mise en oeuvre	Qualité Maintenance	Organiser la production	Optimiser la matière	Optimiser le procédé	Dimension économique	PPCI **	Total
	ECTS CREDIT POINTS		7	3	9	7	5	8	13	11	4	10	32	3	8	120

FOUNDATION DEGREE IN HOSPITALITY MANAGEMENT (YEAR 1 - LEVEL 4)		LEARNING ACTIVITIES						ECVET CREDIT POINTS
		L1 Food and Beverage Operations	L2 Personal Development 1	L3 Introduction to Hospitality Business Finance	L4 Room Divisions Operations	L5 Customer Service	E6 Managing people	
FOOD AND BEVERAGE OPERATION								1
1. Understand the planning, implementation & control processes involved in designing food production & delivery systems								
2. Demonstrate knowledge and operational skills applicable to a range of food and beverage environments								
3. Demonstrate an understanding of the importance of the financial contribution to the sale of space.								12
4. Understand the various methods used to maximise revenues in food and beverage operations.								
5. Understand the need to work safely and hygienically within the food production environment.								
6. Explain the planning and organisation of production and delivery systems.								
PERSONAL DEVELOPMENT 1								3
1. Apply the appropriate written communication techniques when analysing information.								
2. Access and demonstrate the use of relevant resources.								
3. Develop existing skills and acquire new competencies for the hospitality environment.								6
4. Obtain transferable skills necessary for employment.								
5. Present independent research.								
INTRODUCTION TO HOSPITALITY BUSINESS FINANCE								2
1. Demonstrate a knowledge & understanding of the theories, concepts & principles of financial management in hospitality								
2. Examine and evaluate financial documents within your own working environment								
3. Investigate a range of case study material to compare and contrast monitoring and controlling of finance in different areas of hospitality								9
4. Prepare & present cash-flow, profit and loss & balance sheets in widely used formats using appropriate financial terminology								
5. Investigate and evaluate skills and methodology which impact on financial decision-making								
ROOMS DIVISION OPERATIONS								1
1. Understand customer needs and how these needs can be met								
2. Interpret a range of information required for day-to-day rooms division operations								
3. Demonstrate professional skills relevant to rooms operations								12
4. Demonstrate an understanding of the important financial contribution of the rooms division to the overall revenues generated								
5. Identify and understand the law relevant to rooms division operations								
6. Demonstrate an understanding of the function and processes of maintenance management								
CUSTOMER SERVICE								1
1. Evaluate what is required for effective customer service								
2. Identify the effectiveness of a mission statement								
3. Analyse and evaluate the customer services related practices and procedures								
4. Evaluate an appropriate range of communication skills in response to customer needs								12
5. Identify causes of service quality downturns								
6. Compare and contrast customer training in relation to practice								
7. Identify and analyse existing customer service practices								
8. Evaluate and recommend further training required for the process of increased sales and customer/staff retention.								
MANAGING PEOPLE								2
1. Identify organisational theories and explain their relevance to the hospitality environment today.								
2. Investigate management behaviour and leadership approaches, attributes and skills.								
3. Recognise the contribution of motivation to the management of people.								9
4. Analyse the role of teamwork and communication in the effective management of people within hospitality								
5. Identify practical ways of improving motivation, communication and teamwork within an organisation								
20	20	20	20	20	20	20	20	60
UK CREDIT POINTS								

UNITS OF LEARNING OUTCOMES

UNITS OF LEARNING OUTCOMES	LEARNING ACTIVITIES						ECVET CREDIT POINTS	
	L1 Human Resource Management	L2 Operations Management	L3 Marketing	L4 Business Planning	L5 Personal Development 2	L6 Licensed Premises Management		L6 Rooms Division Management
FOUNDATION DEGREE IN HOSPITALITY MANAGEMENT (YEAR 2 - LEVEL 5)	HUMAN RESOURCES MANAGEMENT							2
	1. Investigate, analyse and evaluate the principles and conventions associated with human resource management							
	2. Demonstrate an understanding of contemporary theory surrounding the management of change							
	3. Demonstrate knowledge and understanding of effective and ethical recruitment and selection procedures							10
	4. Analyse the varying strategies of training and development within hospitality							
	5. Explain the purpose of performance management and procedures for providing support in specific individual circumstances							
	6. Identify and explain current employment legislation associated with HRM in the hospitality industry							
	OPERATIONS MANAGEMENT							1
	1. Identify the range of activities and systems requiring management level control in the hospitality industry							
	2. Investigate and compare management styles and theories, and then relate and apply them to the hospitality industry							
	3. Review and evaluate operational activities in order to identify the need for improvement, and then recommend resolutions to problems.							
	4. Explore and compare manual and electronic information systems used in hospitality management.							
	5. Demonstrate an understanding of how the concept of quality control can be integrated into hospitality organisational control							
	6. Compare planned with actual performance and analyse the variances							
	MARKETING							2
	1. Outline the fundamentals of hospitality marketing							
	2. Identify information requirements for marketing management, planning and control							
	3. Have knowledge of the means of acquiring this information, its costs and limitations							
	4. Applying criteria which determine the development of the marketing mix for given situations in order to achieve specific objectives							
	5. Formulate short- and medium term marketing plans in a structured manner applicable to practical situations							
	6. Appreciate the product life cycle, the need for new products development in view of political, environmental, social and technological change							
	7. Assess differences in buyer behaviour and market segments - culture, attitudes and perception							
	BUSINESS PLANNING							3
	1. Research and analyse the impact of the environment on the business							
	2. Design an operational establishment that satisfies market demand							
	3. Work effectively as a 'sole trader' and present an appropriate business plan within identified constraints							
	4. Display a critical insight into the significance of the industry and communicate key points regarding selection of the business and the key market							
	PERSONAL DEVELOPMENT 2							3
	1. Demonstrate research and communication skills through an extensive workplace report							
	2. Assess your own performance and plan your development needs							
	3. Appraise the attributes associated with personal effectiveness within the context of management skills							
	4. Participate in and evaluate career planning and development							
	LICENSED PREMISES MANAGEMENT							2
	1. Outline the general factors affecting the organisation of a range of licensed retail establishments.							
	2. Provide information relating to health, safety, fire and hygiene standards.							
	3. Create the framework for a range of working schedules to cover the responsibilities of staff							
	4. Critically analyse and evaluate the profit and loss account and make recommendations for improvements.							
	5. Understand stock control systems							
	6. Investigate the operational standards of a licensed establishment. Complete a full analysis and demonstrate problem-solving techniques							
	Licensed Premises Management							10
	1. Identify the financial role of the rooms division within the overall operation of the business							
	2. Evaluate methods used to optimise profitability as applied to a fixed capacity inventory							
	3. Identify staffing demands and required skills in respect of the accommodation product							
	4. Identify issues arising from facilities management and the built environment of the rooms division							
	5. Explain how industry codes of conduct and legislative issues directly affect procedures within the rooms division							
	Rooms Division Management							60
	1. As part of a team, plan the production and service operations within the public restaurant.							
	2. Market a themed restaurant to ensure a customer base.							
	3. Develop team-working skills.							
	4. Work to specific deadlines.							
	5. Present a report that evaluates a themed event against set criteria.							
	6. Analyse food and beverage data, reformat the information and offer solution							
	10	10	10	10	10	10	10	60
	ECTS CREDIT POINTS							

BA (HONS) HOSPITALITY MANAGEMENT

INFORMATION TECHNOLOGY STRATEGY FOR HOSPITALITY

1. Be able to comprehensively and critically analyse: using a range of techniques; key strategies used by service providers.
2. Be fully conversant with the applied practical and theoretical processes of developing management strategies.
3. Examine and evaluate the implications of different strategic approaches from a local, regional, national or global perspective as appropriate.
4. Propose a coherent and professional strategic IT management solution; including the assessment of the success or failure of those strategies; and recommendations for alternative options.

GLOBAL MARKETING FOR TOURISM AND HOSPITALITY

1. Evaluate global marketing problems in Tourism and Hospitality using a range of analytical tools and techniques.
2. Critically analyse global marketing strategies and evaluate their competitiveness for sustainable advantage within Hospitality and Tourism.
3. Analyse and evaluate the impact of culture and consumer behaviour on global marketing communications strategies in Hospitality and Tourism.
4. Apply and critically evaluate the marketing mix in a global Tourism and Hospitality context.

ETHICS

1. Examine critically the breadth, diversity and complex nature of the hospitality industry.
2. Explain strategic decisions within the context of the hospitality industry and formulate appropriate responses to complex scenarios requiring a professional and managerial approach.
3. Discuss the application of business ethics and management of change theories to hospitality company policy and practices.
4. Evaluate and apply appropriate theories and concepts from the generic management areas within a hospitality context.
5. Critically review the reliability, validity and significance of data and have an awareness of the provisional nature of the state of knowledge.
6. Transform complex data, concepts and theories towards a given purpose and create innovative solutions.
7. Develop a reasoned argument and challenge assumptions.
8. Access a wide range of resources and information from both academic and industrial sources
9. Initiate a research project relevant to the hospitality context, assemble data and present in a coherent, articulate and professional manner, implementing a professional approach to fieldwork and dealing with industry personnel.
10. Communicate in a professional manner in a variety of formats to include detailed and coherent reports, essays, presentations and discussions.
11. Work independently with a minimum guidance to use a full range of resources, knowledge and skills to solve complex problems.
12. Critically reflect on learning and develop strategies to meet self-initiated goals.

DISSERTATION

1. Compose a detailed research proposal on a topic relevant to your programme
2. Identify your research approach within the general framework of research methodology
3. Locate information from a variety of secondary sources
4. Write a critical literature review that deals effectively with relevant concepts/theories/models
5. Select and implement appropriate primary data collection methods
6. Analyse quantitative and/or qualitative data and evaluate in relations to models/theories
7. Present a dissertation that effectively communicates your research findings

STRATEGIC HOSPITALITY MANAGEMENT

1. Analyse and explain the role and responsibilities of the general manager in the implementation of company policies at local level.
2. Examine the accountability and evaluate the effective use of business resources at the level of the general manager within a single unit, recognising and reconciling contradictions and demonstrating skill in defending and communicating solutions.
3. Investigate theories of strategic management and demonstrate their application using decision making models to evaluate their appropriateness within a variety of hospitality contexts.
4. Examine critically key strategies used by hospitality providers (owner managed through to international corporations) to grow their business.
5. Investigate the implications of strategic approaches at functional, business and corporate levels within business situations, predict potential problems and formulate and defend appropriate solutions.
6. Consider the ethical frameworks that impact on the drawing up of business policies; examine existing policies drawn from within the hospitality industry exposing the strengths and weaknesses against ethical business criteria.
7. Identify areas of strategic opportunity specific to a hospitality company; design, present and evaluate a strategic plan considering policy and implementation issues raised.
8. Analyse international growth patterns predicting the impact of current trends on future strategic plans and speculate on future product developments.

CONSULTANCY

1. Work closely with a corporate client to the highest professional standards.
2. Design appropriate frameworks to meet clients' needs and investigate possible alternatives.
3. Integrate theoretical principles to demonstrate how these underpin the analysis of the problems.
4. Formulate practical solutions to meet the brief given by the client – this to take the form of a critical report.
5. Effectively communicate an analysis of the client's requirements and obtain constructive feedback on performance.
6. Access a wide range of resources and information from both academic and industrial sources

ECTS CREDIT POINTS

L1 Information Technology Strategy for Hospitality	L2 Global Marketing for Tourism and Hospitality	L3 Ethics	L4 Dissertation	L5 Strategic Hospitality Management	L6 Consultancy	ECVET CREDIT POINTS
INFORMATION TECHNOLOGY STRATEGY FOR HOSPITALITY						
2						2
1						9
2						
1.5						
GLOBAL MARKETING FOR TOURISM AND HOSPITALITY						
2	2					12
2	2					
2	2					
ETHICS						
		1				12
		1				
		1				
		2				
		2				
		1.5				
		1				
		1				
		1.5				
		1				
		1				
DISSERTATION						
			1.5			6
			1			
			1			
			1.5			
			2			
			1.5			
STRATEGIC HOSPITALITY MANAGEMENT						
					2	12
					2	
					1	
					1	
					2	
					1	
					2	
					2	
CONSULTANCY						
					1	9
					1.5	
					1	
					1.5	
					1.5	
					1	
20	20	20	20	20	20	60

UNITS OF LEARNING OUTCOMES

European Definitions' Framework (Glossary)

TERM	Source: ECVET Recommendation/ Get to Know ECVET Better/CEDEFOP/Other	ECTS User's Guide
Assessment criteria		Descriptions of what the learner is expected to do, in order to demonstrate that a learning outcome has been achieved. (ECTS User's Guide, 2009)
Award of credit		The act of delivering learners the number of credits that correspond/are assigned to the component or a qualification. The award of credit recognises that learners' learning outcomes have been assessed and that the learner satisfied the requirement for the educational component or the qualification. (ECTS User's Guide, 2009)
Assessment of learning outcome	Methods and processes used to establish the extent to which a learner has attained particular knowledge, skills and competence. (ECVET Q&A)	
Competence(s)	The proven ability to use knowledge, skills and personal, social and/or methodological abilities in work or study situations and in professional personal development. (ECVET Q&A) The ability to apply learning outcomes adequately in a defined context (education, work, personal or professional development). Competence is not limited to cognitive elements (involving the use of theory, concepts or tacit knowledge); it also encompassed functional aspects (involving technical skills) as well as interpersonal attributes (e.g. social or organisational skills) and ethical values. (CEDEFOP, 2004, European Commission, 2006a.)	A dynamic combination of cognitive and metacognitive skills, knowledge and understanding, interpersonal, intellectual and practical skills, ethical values and attitudes. 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. (ECTS User's Guide, 2009)

Source:

ECVET Recommendation/ Get to
Know ECVET Better/CEDEFOP/Other

ECTS User's Guide

TERM

<p>Credit system</p>	<p>An instrument designed to enable accumulation of learning outcomes in formal, non-formal and/ or informal settings, and facilitate their transfer from one setting to another for validation and recognition. A credit system can be designed:</p> <ul style="list-style-type: none">— By describing an education or training programme and attaching points (credits) to its components (modules, courses, placements, dissertation work, etc.); or— By describing a qualification using learning outcomes units and attaching credit points to every unit. <p>(CEDEFOP, 2004, European Commission, 2006c.)</p> <p>Credit systems are the feature of a training system in which qualifications are designed in components (units or modules), and in which there are explicit rules on how these units/modules can be accumulated and/or transferred by the learners. This means that all qualifications have to be built so as to enable credit accumulation and transfer. This does not necessarily imply the use of a credit point convention.</p> <p>(CEDEFOP, January 2010)</p>	<p>ECTS: The expressing of the volume of learning based on what the workload students need in order to achieve the expected outcomes of a learning process at a specified level.</p> <p>(ECTS User's Guide, 2009)</p>
<p>Credit accumulation</p>	<p>Process through which learners can acquire qualifications progressively by successive assessments of learning outcomes.</p> <p>(ECVET Q&A)</p>	
<p>Credit transfer</p>	<p>Process through which learning outcomes achieved in one context can be taken into account in another context. Credit transfer is based on the processes of assessment, validation and recognition.</p> <p>(ECVET Q&A)</p>	

Source:

ECVET Recommendation/ Get to
Know ECVET Better/CEDEFOP/Other

ECTS User's Guide

TERM

Credit for learning outcomes A set of learning outcomes of an individual which have been assessed and which can be accumulated towards a qualification or transferred to other learning programmes or qualifications.
(Recommendation of the EP and of the Council on the establishment of ECVET dated 17 April 2009)

Credit value Credit value describes the number of credits that may be awarded to a learner for the successful achievement of the identified learning outcome of a unit, module or qualification.
(Lifelong Learning Network, UK)

ECVET points Means a numerical representation of the overall weight of learning outcomes in a qualification and of the relative weight of units in relation to the qualification.
(Recommendation of the EP and of the Council on the establishment of ECVET dated 17 April 2009)

Education or training path The sum of learning sequences followed by an individual to acquire knowledge, skills or competences. A learning path may combine formal and non-formal learning sequences which validation leads to certification.
(CEDEFOP 2004)

Formal learning Learning that occurs in an organised and structured environment (e.g. in an education or training institution or on the job) and is explicitly designed as learning (in terms of objectives, time or resources). Formal learning is intentional from the learner's point of view. It typically leads to validation and certification.
(CEDEFOP 2004)

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.
(ECTS User's Guide, 2009)

Source:

ECVET Recommendation/ Get to Know ECVET Better/CEDEFOP/Other

ECTS User's Guide

TERM

Non-formal learning	Learning which is embedded in planned activities not explicitly designated as learning (in terms of learning objectives, learning time or learning support). Non formal learning is intentional from the learner's point of view. (CEDEFOP 2004)	Learning that is not provided by an education or training institution and typically does not lead to certification. It is, however, structured (in terms of learning objectives, learning time or learning support). Non-formal learning is intentional from the learner's perspective. (ECTS User's Guide, 2009)
Informal learning	Learning resulting from daily activities related to work, family or leisure. It is not organised or structured in terms of objectives, time or learning support. Informal learning is in most cases unintentional from the learner's perspective. (CEDEFOP 2004)	Learning resulting from daily life activities related to work, family or leisure. It is not structured (in terms of learning objectives, learning time or learning support) and typically does not lead to certification. Informal learning may be intentional but in most cases it is non-intentional (or "incidental"/random). (ECTS User's Guide, 2009)
Learning outcomes	The set of knowledge, skills and competences an individual has acquired and/or is able to demonstrate after completion of a learning process, either formal, non-formal or informal (CEDEFOP 2004)	Are statements of what a learner is expected to know, understand and be able to do after successful completion of a process of learning. (ECTS User's Guide, 2009)
Module		A course unit in a system in which each course unit carries the same number of credits or a multiple thereof. (ECTS User's Guide, 2009).
Qualifications frameworks (QFs)	An instrument for the development and classification of qualifications (e.g. at national or sectoral level) according to a set of criteria (e.g. using descriptors) applicable to specified levels of learning outcomes. Comment: A qualification framework can be used to: — establish national standards of knowledge, skills and competences; — promote the quality of education; — provide a system of coordination and/or integration of qualifications and enable comparison of qualifications by relating qualifications to each other; — promote access to learning, transfer of learning outcomes and progression in learning.	

Source: based on European Commission, 2006a; OECD, 2007.

Related terms: European qualification framework (EQF), qualification system

The European qualifications framework (EQF) is a common European reference framework which links countries' qualifications systems together, acting as a translation grid to make qualifications more readable and understandable across different countries and systems.
(CEDEFOP)

Qualifications frameworks operating at national, regional or sectoral level can take many forms and this term also requires common understanding. Current OECD work provides the following definition:

A qualifications framework is an instrument for the development and classification of qualifications according to a set of criteria for levels of learning achieved. This set of criteria may be implicit in the qualifications descriptors themselves or made explicit in the form of a set of level descriptors.

The scope of the frameworks may be comprehensive of all learning achievement and pathways or may be confined to a particular sector, for example, initial education, adult education and training, or an occupational area.

Some frameworks may have more design elements and a tighter structure than others; some may have a legal basis, whereas others may represent a consensus of views of social partners.

All qualifications frameworks, however, establish a basis for improving the quality, accessibility, linkages and public or labour market recognition of qualifications within a country and internationally.

(Recommendation of the European Parliament and of The Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning)

Source:

ECVET Recommendation/ Get to
Know ECVET Better/CEDEFOP/Other

ECTS User's Guide

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Recognition of credit	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. (ECTS User's Guide, 2009)
Recognition of Learning Outcomes	The process of attesting officially achieved learning outcomes through the awarding of units or qualifications. (ECVET Q&A).
Skills	The ability to perform tasks and solve problems. (CEDEFOP 2006a) The ability to apply knowledge and to use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments. (Recommendation of the EP and of the Council on the establishment of ECVET dated 17.4.2009).
Unit/Unit of learning outcomes	(ECVET) A set of knowledge, skills, and/or competence which constitute a coherent part of a qualification. A unit can be the smallest part of a qualification that can be assessed, transferred, validated and, possibly certified. A unit can be specific to a single qualification or common to several qualifications. The characteristics of units (content, size, total number of units composing a qualification, etc.) are defined by the competent body responsible for the qualification at the appropriate level. The definition and description of units can vary according to the qualification system and the procedures of the competent body. However, ECVET system proposes to provide for every unit: — the generic title of the unit; — the knowledge, skills and competence which are contained in the unit; — the criteria for assessment of the corresponding learning outcomes. (European Commission, 2006c.)

Source:
ECVET Recommendation/ Get to ECTS User's Guide
TERM Know ECVET Better/CEDEFOP/Other

Unit means a component of a qualification, consisting of a coherent set of knowledge, skills and competence, that can be assessed and validated.

(Recommendation of the EP and of the Council on the establishment of ECVET dated 17.4.2009).

References

Legal Texts

Convention on the Recognition of Qualifications concerning Higher Education in the European Region: Lisbon, 11.4.1997. CETS No.: 165. Council of Europe/ UNESCO. [online]. → [link](#)

Recommendation of the European Parliament and of the Council on the establishment of the European Qualifications Framework for lifelong learning: April 2008. Official Journal of the European Union, 6.5.2008, C111/1. [online]. → [link](#)

Recommendation of the European Parliament and of the Council on the establishment of the European Credit system for Vocational Education and Training (ECVET): June 2009. Official Journal of the European Union, 8.7.2009, C 155/11. [online]. → [link](#)

Recommendation Rec(2002)6 of the Committee of Ministers to member states on higher education policies in lifelong learning: 2002. Council of Europe, Committee of Ministers. [online]. → [link](#)

*European Quality Assurance Reference Framework for Vocational Education and Training ***I P6_TA(2008)0627. European Parliament legislative resolution of 18. December 2008 on the proposal for a recommendation of the European Parliament and of the Council on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training (COM(2008)0179— C6-0163/2008 — 2008/0069(COD)). Official Journal of the European Union, 23.2.2010, C45/E183. [online]. → [link](#)*

Documents of the European Union

ECTS Key Features: 2008. European Commission, Education & Training. [online]. → [link](#)

ECTS User's Guide: 2009. European Commission, Education & Training. [online]. → [link](#)

A Memorandum on Lifelong Learning (of 30 October 2000). Commission Staff Working Paper (2000) 1832 final. [online]. → [link](#)

Focus on Higher Education in Europe 2010: The impact of the Bologna Process. Eurydice 2010. ISBN 978-92-9201-086-7. [online]. → [link](#)

Higher Education in Europe 2009: Developments in the Bologna Process. Eurydice 2009. ISBN 978-92-9201-023-2. [online]. → [link](#)

Focus on the structure of higher education in Europe. National trends in the Bologna Process - 2006/07 Edition. Eurydice 2007. ISBN 978-92-79-05372-6. [online]. → [link](#)

Declarations, communiqués and texts adopted by the Ministers - Bologna Process

The European Higher education Area (The Bologna Declaration of 19 June 1999). [online]. → [link](#)

Towards The European Higher education Area (The Prague Communiqué of 19 May 2001). [online]. → [link](#)

Realising the European Higher Education Area (The Berlin Communiqué of 19 September 2003). [online]. → [link](#)

The European Higher Education Area - Achieving the Goals (The Bergen Communiqué of 20 May 2005). [online]. → [link](#)

Towards the European Higher Education Area: responding to challenges in a globalised world. (The London Communiqué of 18 May 2007). [online]. → [link](#)

The Bologna Process 2020 - The European Higher Education Area in the new decade (The Louvain-la-Neuve Communiqué of 29 April 2009). [online]. → [link](#)

European Higher Education Area (Budapest-Vienna Declaration on the European Higher Education Area of 12 March 2010). [online]. → [link](#)

The framework of qualifications for the European Higher Education Area (adopted by Ministers responsible for higher education in May 2005). [online]. → [link](#)

The EUA Bologna Hand Book, Raabe 2006, ISBN 3-8183-0209-X. Adam, S., Chapter B 2.3-1, *Introducing Bologna Objectives and Tools - An introduction to learning outcomes*;

Other standard setting documents

Diploma Supplement. European Commission, Council of Europe and UNESCO/CEPES model. [online]. → [link](#)

Reports and research papers

A Framework of Qualifications for The European Higher Education Area (2005). Background Report. Published by: Ministry of Science, Technology and Innovation, Danmark. ISBN: 87-91469-54-6. [online]. → [link](#)

Rauhvargers, A., Deane, C., Pauwels, W. *Bologna Process Stocktaking Report 2009.* (Report from working groups appointed by the Bologna Follow-up Group to the Ministerial Conference in Leuven/Louvain-la-Neuve). [online]. → [link](#)

Bologna at the Finish Line. The European Students' Union, 2010. [online]. → [link](#)

Speaking notes for the Budapest and Vienna Ministerial conference, 11-12th of March 2010. The presentation of Ligia Deca, the Chairperson of ESU. [online]. → [link](#)

Le Mouillour, I. (2010). *Linking credit systems and qualifications frameworks: An international comparative analysis: Selected results.* CEDEFOP: Area ECVL/ILEMO/2010/029;

Štastná, V. *Aligning National against European Qualification Frameworks: The Principles of Self-Certification (final report).* Oficiální seminář Boloňského procesu, Tbilisi, State University, 27.-28. 11. 2008 [online]. → [link](#)