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# ENHANCE Framework for Innovative Learning Opportunities



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# ENHANCE Framework for Innovative Learning Opportunities<sup>1</sup>

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<sup>1</sup> This is the new name of the Framework, compliant the European Education Pathways Ecosystem (model A: Innovative Learning Campus), adopted by the ENHANCE Steering Committee, and the European Learning Model promoted by the European Commission – see Section 3. In the Grant Agreement it was called “ENHANCE framework for joint short-term educational offers”.

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## 1. Introduction

In recent years, a trend towards diversification of education provision by higher education institutions can be observed. In addition to the traditional bachelor's, master's or doctoral degree programmes, various new short, more flexible, learner-centred forms of education and training that fit the needs of a wider range of learners have been offered. Also other public and private providers offer different forms of short-term education and training targeting various groups of learners.

This is the response to the changes on the labour market, where a growing number of adults, with a higher education degree or lower, seek opportunities to reskill and upskill to fill the gap between the competencies acquired through initial formal learning and emerging knowledge and skills needed. In particular, the COVID-19 crisis has resulted in a substantial increase in demand and supply of various forms of flexible online continuing education and training offered by higher education institutions and other providers.

These alternative forms of learning have been offered under different names, leading to confusion and problems with their understanding, recognition and appreciation by prospective learners and employers<sup>2</sup>. This has resulted in an effort, in particular in Europe, to address this issue and develop measures that would allow interested stakeholders to better understand and recognise the value of various forms of short education and training programmes and the resulting credentials, for which the term 'micro-credentials' is currently increasingly commonly used<sup>3</sup>.

Although the development of micro-credentials and various other forms of innovative learning opportunities is primarily market-driven, they are beneficial not only for professionals who would like to update their competences or acquire new competences that would give them a better position on the labour market. Innovative learning opportunities, including micro-credentials, especially those offered by higher education institutions, bring benefits to students enrolled in traditional degree programmes, complementing or supplementing these programmes, in particular through enhancing students' opportunities to develop transferable skills useful for their future careers.

The proliferation and high interest in micro-credentials and other forms of short-term learning opportunities can also be seen as a symptom of a general trend in higher education model – a shift, by increasingly higher percentage of university students, from one-time experience (degree programme) to various forms of shorter learning, experienced throughout the lifetime (lifelong learning).

Short-term education and training programmes also create new opportunities for various groups learners. They address the needs of those who would like to enhance their personal competencies and also create pathways into tertiary education for various groups of learners from disadvantaged backgrounds and other underrepresented groups. Also, with the demographic changes observed in Europe, it is of a key importance to create the education offer for elderly people that would allow for active ageing. Therefore, offering various certified short-term forms of learning can be seen as the essential part of the "third mission" of universities and their social responsibility.

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<sup>2</sup> *Micro-credentials and Bologna Key Commitments State of play in the European Higher Education Area*, MICROBOL, February 2021, [https://microcredentials.eu/wp-content/uploads/sites/20/2021/02/Microbol\\_State-of-play-of-MCs-in-the-EHEA.pdf](https://microcredentials.eu/wp-content/uploads/sites/20/2021/02/Microbol_State-of-play-of-MCs-in-the-EHEA.pdf).

<sup>3</sup> In this introductory section, we use the term 'micro-credentials' to denote both innovative education and training programmes and the resulting credentials. A more precise definition is given in Section 3.

Micro-credentials and other innovative learning opportunities have the high potential of social impact. They allow people to maintain and acquire various competences that enable them to participate fully in society, ensure their personal, social and professional empowerment, and thereby create better lives and better opportunities for all. Therefore, micro-credentials are high on the agenda of various political initiatives taking place at the European level. This is reflected in several strategic documents of the European Commission, including:

- the communication on achieving the European Education Area by 2025<sup>4</sup>,
- the updated Digital Education Action Plan<sup>5</sup>,
- New Skills Agenda for Europe<sup>6</sup>,
- the communication on European Strategy for Universities<sup>7</sup>.

Several research projects on micro-credentials, including MICROBOL (Micro-credentials linked to the Bologna Key Commitments), MicroHE and MicroCredX<sup>8</sup>, were and are being supported by the European Commission, resulting in reports presenting, inter alia, problems with the development of the European approach to micro-credentials.

The work of the Micro-Credentials Higher Education Consultation Group, established by the European Commission, resulted in the report proposing a common definition and the EU standard for the constitutive elements of micro-credentials. Following the consultation of this report, the Commission submitted a proposal for a Council Recommendation on micro-credentials for lifelong learning and employability. This proposal was adopted by the EU Council on 16 June 2022 to become a fundamental document defining “a European approach to micro-credentials”<sup>9</sup>.

As stated on the website of the European Commission supported projects<sup>10</sup>: *“Strategically, it is believed that in the long-term micro-credentials will become a major pillar of university service, alongside teaching of degrees and research. In quantitative terms, we expect to see a steady linear growth curve in the number of certified micro-credentials, with a shape similar that to the growth in MOOCs.”*

Micro-credentials draw significant interest of academic community. European University Association, comprising ca. 800 European universities, in its policy input report states<sup>11</sup>: *Higher education institutions are one of the key providers of micro-credentials and they are the drivers of innovation in this area. ... To a large extent, offering them is a way to respond to the needs of society and thus part of an institution’s societal mission.*

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<sup>4</sup> Communication on Achieving the European Education Area by 2025, COM(2020) 625 final, European Commission, Brussels, 30.09.2020, [https://ec.europa.eu/education/resources-and-tools/document-library/eea-communication-sept2020\\_en](https://ec.europa.eu/education/resources-and-tools/document-library/eea-communication-sept2020_en).

<sup>5</sup> Digital Education Action Plan 2021-2027: Resetting education and training for the digital age, European Commission, 2020, [https://ec.europa.eu/education/education-in-the-eu/digital-education-action-plan\\_en](https://ec.europa.eu/education/education-in-the-eu/digital-education-action-plan_en).

<sup>6</sup> European Skills Agenda for Sustainable Competitiveness, Social Fairness And Resilience, European Commission, 30.06.2020, <https://ec.europa.eu/social/main.jsp?catId=1223>.

<sup>7</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a European Strategy for Universities, European Commission, 18.1.2022, <https://education.ec.europa.eu/sites/default/files/2022-01/communication-european-strategy-for-universities.pdf>.

<sup>8</sup> Micro-credentials in a nutshell, <https://microcredentials.eu> [accessed 28.10.2024].

<sup>9</sup> Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability; Official Journal of the European Union, 27.06.2022, [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627\(02\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627(02)).

<sup>10</sup> Expected impact of our Micro-Credential projects, <https://microcredentials.eu> [accessed 4.11.2024].

<sup>11</sup> Micro-credentials supporting flexible higher education and lifelong learning, European University Association, July 2021, <https://www.eua.eu/publications/policy-input/micro-credentials-supporting-flexible-higher-education-and-lifelong-learning.html>.

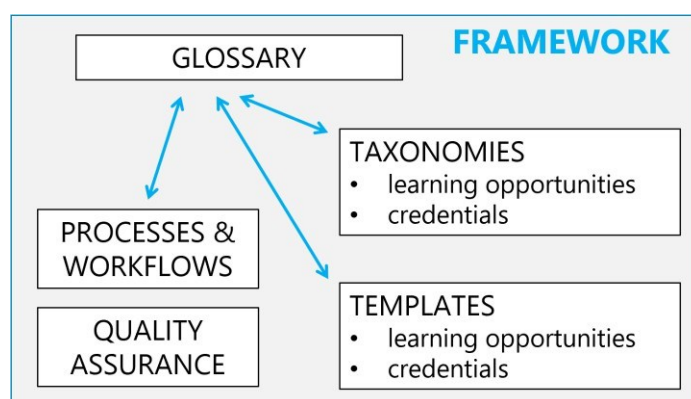
Micro-credentials are also becoming an essential component of the Bologna Process aimed at creation of the European Higher Education Area (EHEA). This is reflected in communiqués issued at subsequent meetings of ministers responsible for higher education in EHEA. In the recent communiqué<sup>12</sup>, the ministers recommend reviewing the key EHEA operational document – “ECTS Users’ Guide” and adapt it to current developments, including micro-credentials.

In this context, it is expected that the significant progress will be made as a result of the European Universities Initiative with European Universities developing and testing micro-credentials, thereby paving the way for other higher education institutions to follow. In fact, several European Universities alliances, including ENHANCE, have already reported some achievements in this area.

At ENHANCE, the development and implementation of micro-credentials and other innovative learning opportunities started during the first project (2020-2023) – see Annex 1. In 2021, the ENHANCE micro-credentials framework, defining basic concepts, typology of ENHANCE micro-credentials and constitutive elements of the micro-credential description, was adopted. Based on this framework various forms of innovative learning opportunities were developed and offered to ENHANCE community (certificate programmes, summer/winter schools, workshops, seminars, staff weeks, etc.).

In the new ENHANCE+ project (2023-2027) a significant upscaling of the ENHANCE micro-credentials and the development of other formats of innovative learning opportunities is foreseen. Therefore, a substantial revision and upgrade of the framework underlying the development and implementation of these innovative learning opportunities, accounting also for experience gathered in 2021-2023, is needed. In this document, such a revised framework is presented.

The main components of the Framework are shown below.



The main purpose of the framework is to establish a common language used across ENHANCE when developing and implementing innovative learning opportunities, in particular when:

- collecting proposals for innovative learning opportunities (assuring consistency in their description),
- presenting the ENHANCE educational offer to prospective learners in a systematic way,
- defining the structure and content of the documents issued to learners who successfully complete learning activities related to innovative learning opportunities,
- specifying requirements for IT tools and services that would support the development and implementation of innovative learning opportunities,
- monitoring the implementation of innovative learning opportunities and the related analyses.

<sup>12</sup> Tirana Communiqué, Tirana EHEA Ministerial Conference, 29-30 May 2024, <https://ehea2024tirane.al/2024-tirana-communique>.

The precise, formal language of the Framework is therefore particularly useful for:

- Education/Mobility Officers,
- Communication Officers,
- the team responsible for cooperation with developers of IT tools and services supporting the development and implementation of innovative learning opportunities,
- the team responsible for analyses, quality assurance, and reporting on the development and implementation of innovative learning opportunities,
- authors of strategic documents, policy documents, toolkits, etc. related to Innovative Learning Campus.

Using the formal language of the Framework in internal ENHANCE communication does not preclude using a slightly different language in less formal communication, in particular when advertising the ENHANCE learning opportunities to students and other learners.

## 2. Revising the Framework for the Development and Implementation of Innovative Learning Opportunities

The development and implementation of ENHANCE micro-credentials and other innovative learning opportunities started during the first project (2020-2023) – see Annex 1. Based on the ENHANCE micro-credentials framework adopted in 2021, various forms of short-term learning opportunities were developed and offered to ENHANCE community (certificate programmes, summer/winter schools, workshops, seminars, staff weeks, etc.).

In the ENHANCE+ project (2023-2027) a significant upscaling of the ENHANCE micro-credentials offer and the development of other formats of innovative learning opportunities is foreseen. To accomplish this objective, in WP8 – New Formats and Frameworks, coordinated by WUT, we have two tasks aimed at refining our approach to ENHANCE short-term offers, including micro-credentials:

- Task 8.1 (coordinated by WUT): Optimise ENHANCE framework for joint short-term education offers,
- Task 8.2 (coordinated by TUB): Develop administrative processes, workflows and toolkits for joint short-term education offers.

These tasks are dealt with by the WP8 Working Group and the following thematic subgroups:

- Transversal (WP7 + WP8) Working Group on Virtual & Short-term Mobility & Offers,
- Transversal (WP7 + WP8) Working Group on Recognition,
- Working Group on Toolkits.

These working groups and subgroups, composed of representatives of ENHANCE universities, meet at least once a month to discuss key issues related to the development and implementation of ENHANCE innovative learning opportunities. Representatives of our associated partner – Arts et Metiers (ENSAM), Operational Office and Student Forum also take part in selected meetings.

All relevant WP8 documents and resources, in particular the documentation of meetings of the working group and its subgroups, have been made available in the dedicated folder of the ENHANCE File Station on the TUB Cloud accessible by all members of the ENHANCE community.

All WP8 activities are carried out considering the developments in other One Campus WPs (WP7 and WP9). For example, to support the development and implementation of ENHANCE micro-credentials and other formats of innovative learning opportunities with adequate IT tools and services, in WP9 there is task 9.4 (coordinated by WUT): Upgrading the system for the micro-credentials.

It should also be noted that the primary responsibility of WP8 is the coordination of development and implementation of ENHANCE micro-credentials and other formats of innovative learning opportunities. This means that innovative learning opportunities are being developed and implemented also within other WPs.

To learn about the position of ENHANCE members on selected key issues related to the ENHANCE innovative learning opportunities, a survey was launched on 1 December 2023. Until the end of 2024 the questionnaire remained a living document available in the earlier mentioned dedicated folder of the ENHANCE File Station on the TUB Cloud.

On 23 February 2024, the Steering Committee adopted two resolutions essential for the developments taking place within Task 8.1. These resolutions addressed:



- the concept of an ENHANCE micro-credential,
- typology of ENHANCE micro-credentials/short-term offers.

These decisions are discussed in detail in Section 3.

By adopting these resolutions, the Steering Committee gave the WP8 working group cross-Alliance support for fundamental issues that underly the development of the new framework for innovative learning opportunities and related IT solutions.

Another key decision of the Steering Committee which significantly affects the work on the framework for innovative learning opportunities was made in May 2024. The structure of the entire ENHANCE educational offer, referred to as the ENHANCE European Education Pathways Ecosystem, was defined with innovative learning opportunities being 'ENHANCE Innovative Learning Campus' part of this Ecosystem. This fundamental decision was further endorsed through the Memorandum of Understanding adopted on 26 September 2024, paving the way to the more structured approach to the development and implementation of the ENHANCE educational offer.

On 10-11 October 2024, a two-day in-person WP8 meeting took place at WUT. The objective was to discuss draft versions of documents describing key components of the new framework. The outcomes of this discussion are reflected in the following sections of this report.

### 3. New Framework: Scope and Context

Before defining the new framework, it is necessary to decide on its adequate name. In the Grant Agreement, the term ‘ENHANCE framework for joint short-term educational offers’ is used, in particular in the definition of milestone M18: ENHANCE framework for joint short-term educational offers and related processes and workflows. Such a framework should serve as “a basis for development and implementation of joint short-term educational offers”.

However, it should be noted that:

- the term ‘short-term educational offers’ is not used consistently throughout the ENHANCE work packages. In particular, within the WP8 Working Group, we increasingly more often use the term ‘learning opportunities’ which is consistent with ELM: European Education Model<sup>13</sup> (see Section 3.1) and until recently was also used for the showcasing of ‘short-term educational offers’ in the ENHANCE Catalogue (‘Micro-credential and Further Learning Opportunities’);
- some of our offers, such as multi-component programmes leading to micro-credentials, are not short.

Therefore, it is proposed to modify the name of the framework so that:

- instead of ‘educational offers’, the term ‘learning opportunities’ is used,
- instead of ‘short-term’, the term ‘innovative’ is used, to comply with ENHANCE Innovative Learning Campus – the name of model A in the ENHANCE European Education Pathways Ecosystem.

In the remaining part of this report, for the sake simplicity, the new framework will be referred to as ‘ENHANCE+ Framework’, or simply ‘Framework’, whereas the old framework adopted in 2021 will be referred to as ‘Framework 2021’.

The main components of the ENHANCE+ Framework are:

- taxonomies:
  - taxonomy of learning opportunities,
  - taxonomy of credentials/certificates (and related templates),
- administrative processes and workflows,
- concepts and methods for quality evaluation and quality enhancement.

Before presenting this Framework, we describe its context, i.e.

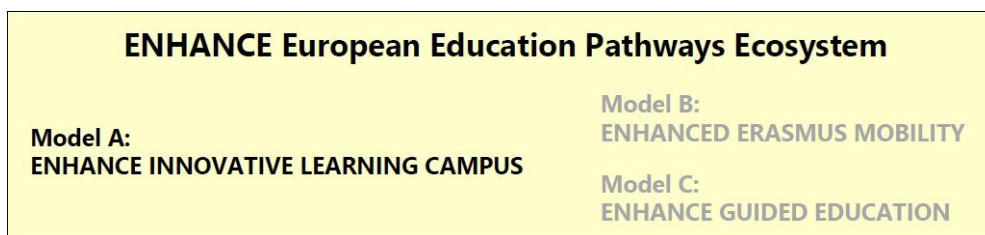
- ENHANCE European Education Pathways Ecosystem within which innovative learning opportunities are being developed and implemented to create the ENHANCE Innovative Learning Campus,
- terminological framework, i.e. definitions of terms relevant for the description of innovative learning opportunities and related processes.

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<sup>13</sup> In ELM / EU Vocabularies the list of ‘types of learning opportunity’ includes, inter alia: challenge, course, internship, mentoring, MOOC, programme module, service learning, short learning programme, study visit, thesis.

### 3.1 ENHANCE European Education Pathways Ecosystem

ENHANCE (joint) innovative learning opportunities are the education offers within the ENHANCE Innovative Learning Campus (Model A) which is part of the ENHANCE European Education Pathways Ecosystem (ENHANCE EEP Ecosystem).



As defined in the document adopted by the Steering Committee and the Board of Directors<sup>14</sup>, within the ENHANCE EEP Ecosystem partners have decided to cooperate through the following three implementation models (see <https://enhanceuniversity.eu/educational-offer>):

- A. ENHANCE INNOVATIVE LEARNING CAMPUS: sharing and/or creating virtual, hybrid, blended education offers and other forms of digitally supported short-term mobility formats accessible to learners within the ENHANCE Alliance,
- B. ENHANCED ERASMUS MOBILITY: optimising physical mobility for students and teaching staff and for thesis/research projects abroad in the framework of the Erasmus+ programme or similar schemes,
- C. ENHANCE GUIDED PATHS: organising and/or co-creating guided education paths ideally embedded into the local study programmes in selected disciplines and accessible by the students of the partners involved.

The partners have also pledged to actively promote and support inclusivity, diversity and equity in all aspects of its learning initiatives by integrating appropriate measures and offering diverse mobility formats to accommodate varying learners' needs, to lower barriers, and to provide targeted support to underrepresented learners within available resources to ensure access to the EEP Ecosystem. This means, in particular, that digital platforms and resources used within the EEP Ecosystem should follow the Web Content Accessibility Guidelines (WCAG)<sup>15</sup>. To meet these goals and objectives, the ENHANCE Diversity Office collaborates with partners and other relevant stakeholders in supporting inclusivity in all ENHANCE activities and building the capacity of staff involved in the EEP Ecosystem through appropriate training.

### 3.2 Terminological framework

#### ENHANCE Innovative Learning Campus Glossary

The terminology used in the following description of the ENHANCE+ Framework is consistent with the terminology proposed in "ENHANCE Innovative Learning Campus Glossary" (revised version of 16 December 2024) – see Annex 1<sup>16</sup>.

The terms defined in the Glossary are grouped into 4 sections:

<sup>14</sup> Memorandum of Understanding among the partners of the ENHANCE Alliance regarding the European Education Pathways Ecosystem (EEP Ecosystem), 2024.

<sup>15</sup> Web Content Accessibility Guidelines (WCAG) 2.1, <https://www.w3.org/TR/WCAG21/> [accessed 12.01.2025].

<sup>16</sup> The Glossary covers only terms relevant for learning opportunities specific for model A of the ENHANCE EEPs Ecosystem. Its extended version will cover also terms relevant for models B and C (e.g., field of study, joint degree programme, multiple degree programme, curriculum, mobility window, etc.).

1. Basic terms,
2. Learning,
3. Learning opportunities and their implementation,
4. Credentials.

The Glossary is a living document; it is likely that definitions of some terms will be modified and some new terms will be defined.

### **Special case: Clarification of understanding of the term ‘micro-credential’<sup>17</sup>**

In the various reports and other publications, the term ‘micro-credential’ has been used to denote two related but different things<sup>18</sup>:

- a credential and the related document confirming the set of specific competencies (knowledge, skills) acquired by the learner,
- learning experience (set of learning activities) leading to such a credential.

This double meaning may create confusion, especially when defining the processes and specification for IT tools.

We propose to clarify this issue, so that in formal documents (ENHANCE+ Framework, specification of IT services, etc.) the term ‘ENHANCE micro-credential’ is used to denote:

- an abstract concept – qualification/set of learner’s competences/learning outcomes<sup>19</sup>, and
- a related document issued to an individual learner.

A different term, namely ‘micro-credential programme’ or just ‘programme’ in the case when no degree programme is meant, is used when referring to a learning opportunity and the related set of learning activities leading to a micro-credential (see also discussion in Section 4.1).

The most convincing argument behind such a solution is its compliance with the EU Council Recommendation<sup>20</sup>, which defines a micro-credential as *“the record of the learning outcomes that a learner has acquired following a small volume of learning”*, and refers in the next part of this definition to *“learning experiences leading to micro-credentials”*, which clearly implies that such experiences (learning activities) are something different from a micro-credential.

This solution, adopted by the Steering Committee on 23 February 2024, does not preclude using the term ‘micro-credential’ in the broader sense (to include also a learning opportunity and the related learning activities) in less formal communication, in particular when advertising the ENHANCE learning opportunities to students and other learners.

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<sup>17</sup> This clarification is not related to requirements on learning activities that are to be completed by the learner to obtain a micro-credential. Such requirements are discussed in Section 4.2.

<sup>18</sup> See, for example, outcomes of the EU-financed projects Microbol and MicroHE, <https://microcredentials.eu>.

<sup>19</sup> *Certificate in Data Literacy* – one of the first ENHANCE micro-credentials – is an abstract concept, as it is, for example, *BS degree in Mechanical Engineering*.

<sup>20</sup> *Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability*; Official Journal of the European Union, 27.06.2022, [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627\(02\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627(02)).

## 4. Taxonomies

### 4.1 Taxonomy of innovative learning opportunities

One of the objectives of WP8 is to develop and implement a broad and diversified offer of innovative learning opportunities.

The existing and future innovative learning opportunities and related learning activities can include, inter alia:

- „traditional” instructor-paced courses,
- MOOCs,
- courses based on Collaborative Online International Learning (COIL),
- summer & winter schools,
- programmes leading to micro-credentials,
- Blended Intensive Programmes (BIPs),
- design projects,
- various types of competitions & challenges, including hackathons,
- staff weeks,
- workshops,
- trainings,
- seminars,
- mentoring programmes,
- service-based learning,
- (language) tandems,

and other formats of learning opportunities/activities<sup>21</sup>.

Such learning opportunities and the related learning activities may differ in terms of:

- target learners (traditional degree-seeking bachelor, master and PhD students, academic and non-academic staff, lifelong learners seeking professional development, the general public),
- credits awarded (credit-bearing or non-credit-bearing),
- certificates issued to learners,
- mode of learning (in-presence, online, blended, hybrid),
- quality assurance (internal, external),

and various other characteristics.

In an attempt to classify learning opportunities for the purpose of their systematic presentation, in particular on the webpage showcasing the ENHANCE educational offer<sup>22</sup>, a major challenge is to strike a balance between simplicity and precision of such a classification. Furthermore, when classifying innovative learning opportunities, we should take into account:

- opinions of learners (students, staff and other lifelong learners), their interest and preferences in selecting various categories of learning opportunities (opinions collected from various sources, including Student Forum and Advisory Assembly),
- potentially conflicting requirements regarding names: names of main categories and subcategories of learning opportunities (and related filters used when browsing the offer on

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<sup>21</sup> It is likely that new formats will be developed and tested within WP3 (Future Learning) and WP8 T8.4 (Testbed).

<sup>22</sup> This currently has the form of the ENHANCE Innovative Learning Campus catalogue, maintained by PoliMi.

the ENHANCE webpage) should strike a delicate balance between being precise and intuitive (understood by intended learners),

- ENHANCE priorities – preferences in promoting (making more visible) certain categories of learning opportunities, in particular those categories, which:
  - are innovative,
  - make ENHANCE distinct among European University Alliances.

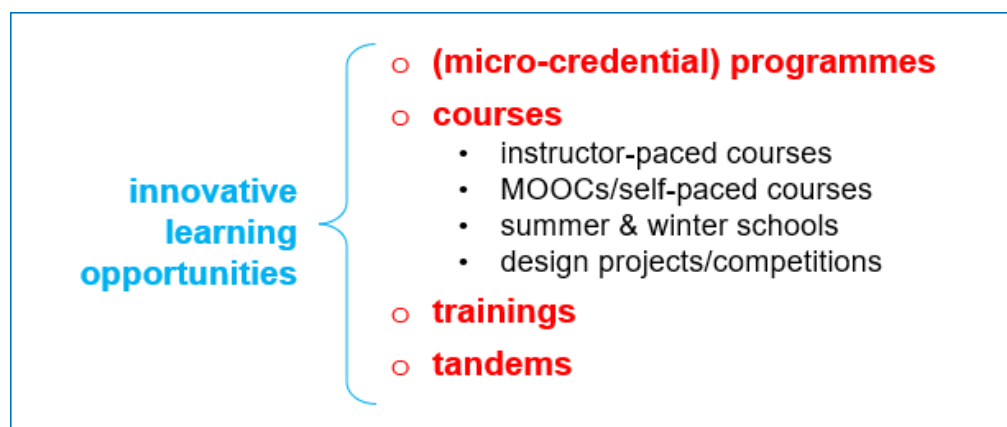
Another question that we have to address is whether or not all learning opportunities available in the ENHANCE Innovative Learning Campus should be included in the related catalogue (in its current form) and be subject to filtering by prospective learners. This question is relevant for:

- one-time offers (e.g. hackathons and challenges),
- offers intended for specific target groups (e.g. staff weeks),
- tandems,
- service-based learning opportunities,

and perhaps also for other types of learning opportunities, some of which are not offered yet.

Taking these considerations into account, the following classification of learning opportunities offered in the ENHANCE Innovative Learning Campus, containing four main categories and four subcategories within one of these categories, is proposed<sup>23</sup>:

- (micro-credential) programmes,
- courses:
  - instructor-paced courses,
  - MOOCs/self-paced courses,
  - summer & winter schools,
  - design projects/competitions,
- trainings,
- tandems.



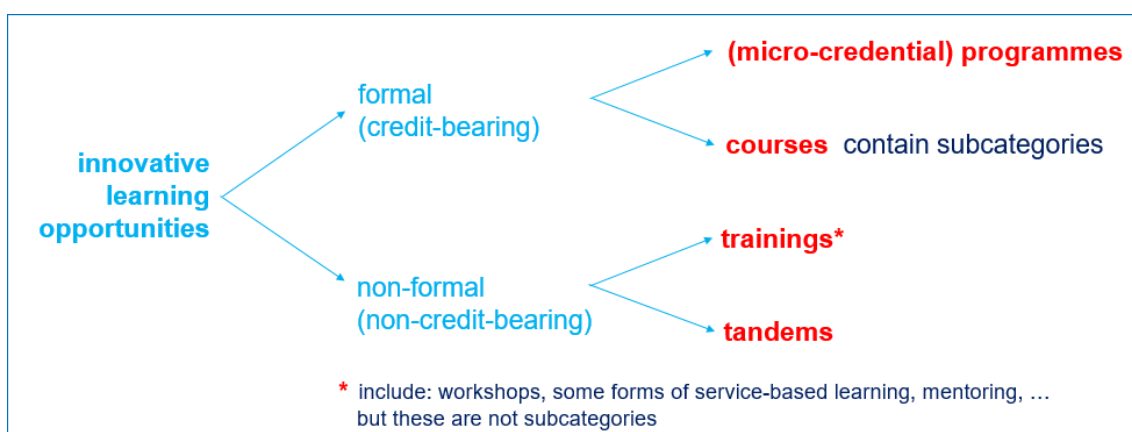
It should be noted that:

- the main categories of learning opportunities are – to a large extent – disjoint, which is generally a very desirable feature of any taxonomy,

<sup>23</sup> This taxonomy is intended primarily as a tool for the classification of innovative learning opportunities for the purpose of their analyses (what we offer and how these offers are implemented) and communication with the IT team – specification of requirements for the related IT services (based on the ELM/EU Vocabulary). In less formal communication, in particular when advertising the ENHANCE learning opportunities to students and other learners, some alternative terms can be used or explanations given for terms that are rather infrequently used in everyday language and might not be understood by the learners (e.g. ‘instructor-paced course’).

- ‘(micro-credential) programmes’ is the only category containing learning opportunities composed of several components (learning units), in many cases offered by different universities.

Furthermore, there is a quite simple relationship between the main categories of learning opportunities in the ENHANCE Innovative Learning Campus and their status as parts of the formal education process resulting in credit (ECTS points or other credits for lifelong learning). There might be some exceptions to this simple relationship (certain self-paced courses with no credits, or credit-bearing trainings), but generally this slightly simplified picture might be useful when explaining the proposed classification of innovative learning opportunities.



The preliminary list of filters to be used in the portal showcasing innovative learning opportunities (currently – ENHANCE Innovative Learning Campus catalogue) includes<sup>24</sup>:

- application period [open, closed],
- academic year\* [2024/2025, 2025/2026, 2026/2027],
- starts in [<list of months>],
- university [<list of ENHANCE members>],
- learning opportunity type (category or subcategory) [(micro-credential) programme, instructor-paced course, MOOC, summer/winter school, design project/competition],
- topic\* [Climate Action, AI and Digitalisation, Smart and Sustainable Cities and Communities, ...]<sup>25</sup>,
- target group\* [bachelor students, master students, PhD students, academic staff, non-academic staff, lifelong learners]<sup>26</sup>,
- mode of learning [in-presence, online, blended, hybrid],
- places available [limited, unlimited],
- language of instruction [English, <list of 7 languages>],
- credit (ECTS or other measure) [no, yes (slider mechanism)].

The preliminary list of additional attributes to be specified in descriptions of individual learning opportunities, not used for filtering includes:

- type of certificate [ENHANCE micro-credential, ENHANCE badge, ENHANCE certificate of participation, transcript of records/certificate of completion issues by university – ENHANCE member],

<sup>24</sup> Most filters are single choice filters; multiple-choice filters are marked with an asterisk (\*).

<sup>25</sup> ENHANCE+ priority areas are only listed; the list of topics is under discussion; it is likely to be extended/modified.

<sup>26</sup> The list of target groups is under discussion to ensure it is clear for all learners.

- issuing of certificate [depending on the learning opportunity: automatically (to all learners) or on request],
- stackability options [stand-alone, component of an ENHANCE (micro-credential) programme],
- availability of funds for physical mobility [use of a standard disclaimer text],
- frequency/availability of offer [one-time opportunity, offered regularly/periodically].

Learning opportunities offered in the ENHANCE Innovative Learning Campus, considered as components of the joint ENHANCE educational offer<sup>27</sup>, can be developed and implemented:

- by a single university – member of ENHANCE,
- jointly by two or more universities – members of ENHANCE (ideally from different countries).

In either case, the proposal for a particular learning opportunity should be:

- approved by the relevant body at the ENHANCE level<sup>28</sup>,
- offered to learners from the whole Alliance.

Example types of learning opportunities that are included in the joint ENHANCE educational offer are shown below.

	single component (learning unit)	multiple components (learning units)
<b>developed &amp; implemented by a single university</b>	„traditional” course, design project	(micro-credential) programme
<b>jointly developed &amp; implemented (by 2+ universities)</b>	BIP-based summer school, COIL module	joint (micro-credential) programme

## 4.2 Taxonomy of credentials and related certificates

In the Framework 2021, badges were one of the two basic categories of ENHANCE micro-credentials, while certificates being the second (see Annex 1). However, this does not comply with the European approach to micro-credentials<sup>29</sup>, which requires assessing learning outcomes and specifying notional workload. This implies that a badge, which does not involve a formal assessment of learning outcomes and may not have the notional workload specified, is not a micro-credential according to the European standards. Therefore, badges are no longer considered as ENHANCE micro-credentials, as discussed and approved by the Steering Committee on 23 February 2024.

The new taxonomy of ENHANCE credentials includes:

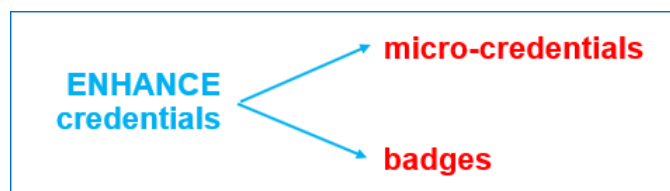
- micro-credentials: credentials with clearly defined learning outcomes, ECTS points or other measure of workload specified, and formally assessed learning outcomes,
- badges: credentials without ECTS points or other measure of workload or formal assessment of learning outcomes.

<sup>27</sup> This is reflected in the document issued to the learner, which contains the ENHANCE logo.

<sup>28</sup> Currently, the group of Education Officers representing all ENHANCE member universities serves as such a decision-making body.

<sup>29</sup> *Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability*; Official Journal of the European Union, 27.06.2022; [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627\(02\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627(02)).





In the first ENHANCE project (2020-2023) it was assumed that a micro-credential should confirm a meaningful volume of learning outcomes so that it would be worth including in the learner's CV. This was reflected in the development of micro-credentials like the ENHANCE Certificate in Data Literacy, ENHANCE Certificate in Climate Action, ENHANCE Certificate in Higher Education Teaching

Several members of the ENHANCE+ WP8 working group found the 2021 approach too restrictive, leading to a survey indicating a need to loosen requirements. On the other hand, not everyone agreed with the straightforward and least restrictive concept of awarding an ENHANCE micro-credential for any learning activity with ECTS points (or other measure of learner's workload, such as study load or CEU), satisfying all the other EU Council recommendations, developed by:

- two or more ENHANCE universities, or
- an ENHANCE university,

and adopted by a relevant ENHANCE body.

In our taxonomy of learning opportunities we therefore distinguish between:

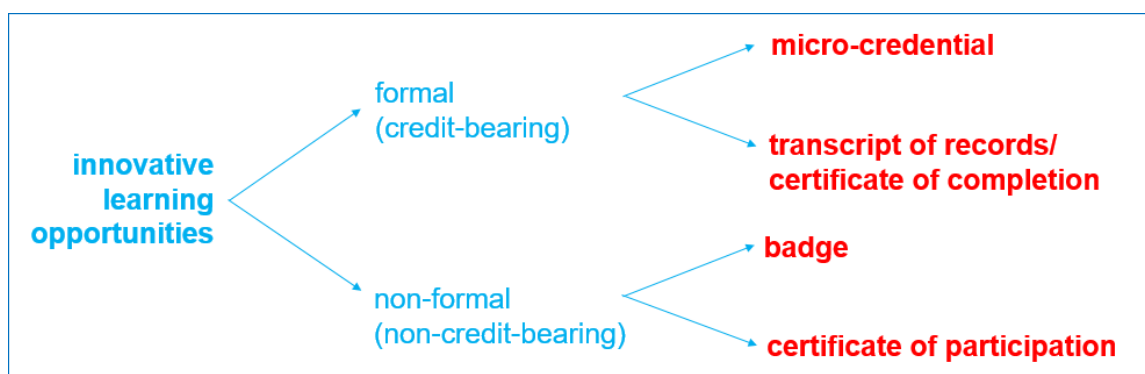
- learning opportunities developed for ENHANCE (by a single university or jointly by two or more ENHANCE universities), complying with ENHANCE micro-credentials requirements and resulting in ENHANCE micro-credentials,
- learning opportunities existing in an ENHANCE university and opened to ENHANCE learners, resulting in transcripts or certificates issued by that university.

In either case, however, an approval by the relevant ENHANCE body of Education Officers is necessary to include the learning opportunity in the ENHANCE Innovative Learning Campus catalogue.

With this approach meeting the goal of developing 30 joint micro-credentials by October 2027 appears realistic.

Additionally, we propose awarding certificates of participation for activities without formal assessment but requiring engagement, such as staff weeks, workshops, training sessions, etc.

This approach leads to the taxonomy of ENHANCE credentials shown below.



	learning outcomes defined	assessment of learning outcomes	credit-bearing*	recipients
micro-credential	YES	comprehensive, formal	YES	all learners
transcript of records/ certificate of completion of learning activity	YES	comprehensive, formal	YES	all learners /on request
badge	YES	less comprehensive, less formal	NO	all learners /on request
certificate of participation in learning activity / event	optional - to inform learners	NO	NO	all learners /on request

\* in either ECTS or equivalent other measure of learner's workload, such as CEU

Awarding an ENHANCE credential has to be confirmed by an appropriate document. The following guidelines on issuing documents (certificates) that confirm ENHANCE credentials are proposed:

1. An ENHANCE micro-credential is confirmed by a certificate of academic achievement or a certificate of professional achievement.
2. An ENHANCE badge is confirmed by the corresponding ENHANCE document.
3. Completion of learning activities associated with a learning opportunity with clearly defined and formally assessed learning outcomes that does not result in an ENHANCE micro-credential is confirmed by a transcript of records or a certificate of completion.
4. Participation in an ENHANCE learning opportunity that requires some form of engagement of learners (staff weeks, workshops etc.) can be confirmed by a certificate of participation upon request.
5. Participation in an ENHANCE learning opportunity that does not require significant contribution is usually not confirmed by a document, but exceptions are possible.

ENHANCE micro-credentials and credentials for learning opportunities jointly developed and implemented by two or more ENHANCE members universities are awarded and the corresponding certificates are issued by the coordinating university on behalf of ENHANCE. Credentials developed and implemented by a single university, opened to ENHANCE learners are awarded and the corresponding certificates issued by that university. The certificates are signed by the academic coordinators of the learning opportunities or by the appropriate persons within the universities.

## 5. Templates of ENHANCE certificates

### 5.1 Specification of ENHANCE credentials

The most rigid rules are formulated for the specification of micro-credentials. The standard elements to describe a micro-credential are defined in Annex 1 of *Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability*<sup>30</sup> include:

1. Identification of the learner
2. Title of the micro-credential
3. Country/region of the issuer
4. Awarding body
5. Date of issuing
6. Notional workload needed to achieve the learning outcomes (in ECTS or other measure when applicable)
7. Level (and cycle, if applicable) of the learning experience leading to the micro-credential (EQF and/or national qualifications framework)
8. Learning outcomes
9. Form of participation in the learning activity
10. Prerequisites\* needed to enrol in the learning activity
11. Type of assessment (testing, application of a skill, portfolio, recognition of prior learning, etc.)
12. Supervision and identity verification during assessment\* (unsupervised with no identity verification, supervised with no identity verification, supervised online or onsite/in-presence with identity verification)
13. Quality assurance of the credential and, where relevant, of the learning content
14. Grade achieved\*
15. Integration/stackability options\* (standalone, independent micro-credential/integrated, stackable towards another credential)
16. Further information\*

Some of these elements, marked with an asterisk (\*), are optional.

All these elements are described and interpreted below in the context of micro-credentials as components of the ENHANCE+ Framework. For credentials/certificates other than micro-credentials, some of these elements can be omitted or their description simplified.

#### Identification of the learner

The learners are identified through their personal data:

- first and last name(s),
- date of birth,
- nationality,
- student identification number or code (if available)<sup>31</sup>,
- other data, specified in the standard to be adopted in the European Higher Education Area.

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<sup>30</sup> *Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability*; [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627\(02\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627(02))

<sup>31</sup> This is included in the Diploma Supplement.

## **Title of the micro-credential**

There are two types/categories of ENHANCE certificates confirming micro-credentials:

- certificates of academic achievement, alternatively referred to as academic certificates,
- certificates of professional achievement, alternatively referred to as specialisation certificates.

The major distinction between these two categories of certificates is made on the basis of their profile (focus, content, learning outcomes) and the primary target group:

- for certificates of academic achievement, their learning outcomes and content, comprising an essential component of knowledge, focus on specific (sub)area/discipline of engineering, natural sciences or transdisciplinary competences; such certificates are primarily intended for bachelor, master or doctoral students,
- for certificates of professional achievement, their learning outcomes and content focus on application of knowledge and/or development of skills in some (sub)area/discipline relevant for the labour market or professional development/career; such certificates are primarily intended for lifelong learners who want to change their skills portfolio to increase their competitiveness in the labour market, but do not see a degree programme as a viable education option.

An example certificate of academic achievement is ENHANCE Certificate in Data Literacy, intended primarily for bachelor students.

An example certificate of professional achievement is ENHANCE Certificate in Higher Education Teaching, intended primarily for academic staff of ENHANCE universities.

## **Country/region of the issuer**

See Awarding body

## **Awarding body**

As the Alliance has no legal status, it has been decided that micro-credentials are awarded by individual universities – members of the ENHANCE Alliance on behalf of the Alliance.

This means that the certification document will be signed by an eligible person from the university that coordinates the development and implementation of the (micro-credential) programme leading to a particular micro-credential. Both the logo of that university and the logo of the ENHANCE Alliance will appear on that document.

## **Date of issuing**

The date of issuing an ENHANCE micro-credential (a document obtained by the learner who is awarded that micro-credential) should correspond to the date when all requirements associated with that micro-credential are satisfied by the learner.

## **Notional workload needed to achieve the learning outcomes**

In principle, ENHANCE micro-credentials are assigned ECTS points. The possible exceptions for certificates of professional achievement can be considered, for which other measures of workload such as Continuing Education Units (CEUs) can be used.

Regarding the range of ECTS points assigned to micro-credentials, two somewhat contradictory premises should be considered:

- a micro-credential should confirm some essential/meaningful volume of learning outcomes so that it would be worth being included in the person's CV,
- lower limit would increase flexibility (stackability) of micro-credentials.

The most flexible solution would be to set a minimum of 1 ECTS point with an upper limit of "less than a full degree". It is recommended, however, that ENHANCE micro-credentials are assigned at least 3 ECTS points or equivalent.

### **Level (and cycle, if applicable) of the learning experience leading to the micro-credential (EQF, QF-EHEA), if applicable**

As each ENHANCE micro-credential has learning outcomes defined, potentially we can assign an EQF level to it – by mapping those learning outcomes onto the European Qualifications Framework (EQF). In practice, however, such a mapping might be quite difficult to achieve as the EQF level descriptors are formulated in rather general terms. In particular, in the case when transdisciplinary skills and personal or social competencies are major components of the set of learning outcomes, it might be difficult to justify mapping them onto a particular EQF level. Therefore, we assume that for some of ENHANCE micro-credentials an EQF level might not be specified.

### **Learning outcomes**

As most ENHANCE micro-credentials are to be assigned EQF levels, we should formulate their learning outcomes in a way that makes it as easy as possible to match these learning outcomes to the EQF level descriptors. This means that the recommended method of formulating and presenting the learning outcomes for ENHANCE micro-credentials is to classify them, explicitly or implicitly, in three categories that are used in the definition of the EQF level descriptors, i.e. *knowledge, skills and responsibility and autonomy*<sup>32</sup>.

For a micro-credential awarded upon completion of a (micro-credential) programme composed of several components (learning units), learning outcomes are defined for the micro-credential as a whole, but also for each component of the related (micro-credential) programme (each learning unit).

### **Form of participation in the learning activity**

A wide spectrum of different forms of learning activities that could lead to an ENHANCE micro-credential are envisioned.

To characterize the participation in the learning activity, we define:

- learning opportunity type – category or subcategory (see Section 4.1):
  - (micro-credential) programme,
  - instructor-paced course,
  - MOOC/self-paced course,
  - summer/winter school,
  - design project/competition or challenge, etc.
- mode of learning (see Annex 2 – Glossary):
  - in-presence,

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<sup>32</sup> Council Recommendation of 22 May 2017 on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (2017/C 189/03), Annex II, Official Journal of the European Union, 15.06.2017.

- online,
- blended,
- hybrid.

For a micro-credential awarded upon completion of a (micro-credential) programme composed of several components (learning units), these characteristics are defined for each component of such a programme (each learning unit).

### **Prerequisites needed to enrol in the learning activity**

This is optional, but for some ENHANCE micro-credentials specification of prerequisites needed to enrol in the learning activity, might be useful and recommended.

In general, prerequisites should be defined in terms of knowledge and skills expected from the learner. Only in specific cases, formal requirements (such as holding a university degree in specific subject area) are to be formulated.

### **Type of assessment (testing, application of a skill, portfolio, recognition of prior learning, etc.)**

Various types/methods of learning outcomes assessment can be adopted, depending on the learning outcomes, form(s) of learning activity and forms of participation in the learning activity. Special needs of disadvantaged students can also be taken into account. Whatever methods of learning outcomes assessment are adopted, they are to be specified.

For a micro-credential awarded upon completion of a (micro-credential) programme composed of several components (learning units), the type of assessment is defined for each component of such a programme (each learning unit).

### **Supervision and identity verification during assessment\* (unsupervised with no identity verification, supervised with no identity verification, supervised online or onsite with identity verification)**

This is optional, but in case when the assessment of learning outcomes for a particular micro-credential involves tests/examinations, the method of supervision and identity verification during assessment is part of the micro-credential description.

For a micro-credential awarded upon completion of a (micro-credential) programme composed of several components (learning units), the type of assessment is defined for each component of such a programme (each learning unit).

### **Quality assurance of the credential and, where relevant, of the learning content**

Assuring quality of innovative learning opportunities and related credentials, in particular quality assurance for (micro-credential) programmes leading to micro-credentials, is discussed in a separate part of the Framework – see Section 9.

### **Grade achieved\***

This is optional. However, the grade might be an essential element of the description for some micro-credentials, especially those that are stackable and can be recognised as a partial fulfilment of the

requirement for a degree. If grades are given, the grading system of the university that awards the micro-credential is explained to facilitate recognition processes.

For a micro-credential awarded upon completion of a (micro-credential) programme composed of several components (learning units), the grade can be given for each component of such a programme (each learning unit) using the grading system of the university that offers this learning unit.

Some grade conversion tool available to all European universities, such as EGRACONS<sup>33</sup>, can be applied if the grade is to be interpreted in the context of a degree programme offered at some other university.

### **Integration/stackability options\* (standalone, independent micro-credential/integrated, stackable towards another credential)**

A micro-credential can be:

- stand-alone, related to an independent learning opportunity; this is usually the case with micro-credentials relevant for the labour market;
- related to a learning unit (course, module) or an internally coherent composition of a number of learning units focused on a specific topic or field, being a component of:
  - one or more conventional bachelor's, master's or doctoral degree programmes,
  - one or more non-degree programmes offered to lifelong learners,
  - one or more (micro-credential) programmes leading to micro-credentials;such a learning unit or collection of learning units is obviously stackable, i.e. can be recognised as a partial fulfilment of requirement for a "larger" credential/qualification.

It would be desirable to decide to what extent parts of degree programmes offered by ENHANCE universities can be converted into micro-credential (determine criteria for such a conversion) and offered as such to those who, for various reasons, do not see a degree programme as a viable education option.

In this context, it is worth emphasising that a collection of micro-credentials is not a substitute for a bachelor's or master's degree; it might, however, be a valuable addition to the university degree.

### **Further information\***

Besides the constitutive elements (defined in the proposed EU Standard) included in a document owned by the learner, the characteristics of a micro-credential may, optionally, include additional information. Any further information on a particular micro-credential may serve two purposes:

- providing a person who considers taking advantage of the learning opportunity leading to this micro-credential with additional information that would facilitate such a decision,
- making the document obtained by the learner more valuable/informative for stakeholders (employers etc.).

Such additional information can be the part of the micro-credential template or just the part of the description of a particular micro-credential presented to prospective learners on the portal that contains the ENHANCE innovative learning opportunities.

For an ENHANCE micro-credential, the basic characteristics can be complemented with the information on:

- general orientation/profile and primary target group (academic, research-oriented, professional, focus on transversal skills, general interest, ...),
- language(s) of instruction,

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<sup>33</sup> EGRACONS: Grade Conversion System, <http://egracons.eu> [accessed 25.06.2021].

- availability (limited to selected groups of students, e.g. students enrolled for degree programmes at ENHANCE universities, open to general public, etc.),
- duration – time it takes to complete the learning activities necessary to obtain that micro-credential, if not specified in the description of the form of participation in the learning activity; this time usually remains undefined for self-paced learning,
- fees, if applicable, for registration, examination, issuing a document/certificate confirming the micro-credential etc.,
- form of the document/certificate acknowledging the micro-credential (digital-only, paper document, other options),
- partnership with external organisation (e.g. not limited to ENHANCE associated partners) in developing the micro-credential,
- professional endorsement/accreditation (employers or employers' associations recommendation, professional associations acceptance for licensing purposes etc.),

and possibly other information.

In case of a micro-credential with a specified EQF level, the field (ISCED code) can be additionally specified in line with "Elements for data fields for the electronic publication of information on qualifications with an EQF level"<sup>34</sup>.

In general, the need for additional information and its scope are to be determined individually for each particular micro-credential. As alluded, such information can be included in the 'Further information' part of the document acknowledging the micro-credential or be part of the micro-credential description presented by the ENHANCE Alliance and the university awarding the micro-credential to potential learners.

## 5.2 Templates

The following templates were developed within the first ENHANCE project (in mid-2023) and are still being used:

- ENHANCE micro-credential in the form of a certificate of academic achievement or certificate of professional achievement,
- certificate of completion of a learning activity offered by ENHANCE,
- certificate of participation in a learning activity offered by ENHANCE.

They are available in the dedicated WP8 folder of the ENHANCE File Station on the TUB Cloud (see Section 2). In Annex 3, adjusted templates compliant with the terminology used in this Framework are presented.

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<sup>34</sup> Council Recommendation of 22 May 2017 on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (2017/C 189/03), Annex VI, Official Journal of the European Union, 15.06.2017.



## 6. Administrative processes & workflows – basic concepts

This section describes the administrative processes and workflows around the implementation of ENHANCE innovative learning opportunities. It is based on the document “Process models for micro-credentials” (M. Kaleta, P. Pałka, WUT) that has been revised to integrate the current status of the (still ongoing) discussions within the working group “Virtual & Short-term Mobility & Offers” (referred to as WG) in the One Campus Cluster of the ENHANCE+ project. In addition, the outcomes of the discussions within other working groups of the three One Campus work packages (WP) have been integrated into this document. As the discussions are still ongoing, the processes described in this report will need to be adjusted and finetuned during the upcoming year in close alignment with the finalization of the IT masterplan (T9.3 leading to D9.1) and the work on the foreseen central digital service for the management of ENHANCE innovative learning opportunities in WP9 (T9.4 leading to D9.3). In addition, we aim to continuously integrate the experiences we gather and feedback we receive during the implementation.

### 6.1 Basic notions

ILO	Innovative Learning Opportunity – educational offer by one single or multiple ENHANCE member(s) that is part of the ENHANCE Innovative Learning Campus.
ENHANCE ILO	An ILO that is showcased in the ILO catalogue and is certified by an ENHANCE member university on behalf of ENHANCE with an ENHANCE certificate. ENHANCE ILOs are created (or adjusted) and implemented specifically for ENHANCE.
University ILO	An ILO that is showcased in the ILO catalogue and is certified by an ENHANCE member university on its own behalf with a university certificate or transcript of records. University ILOs are already existing ILOs that are opened to ENHANCE learners.
ILO template	A template for specifying an ILO – defined as part of the ENHANCE framework for innovative learning opportunities.
ILO specification	ILO template filled in with data describing a particular ILO.
ILO catalogue	A shared catalogue to showcase ILO descriptions for both ENHANCE ILOs and university ILOs that are opened to ENHANCE learners.
ET	ENHANCE Training – description of implementation of an ENHANCE ILO comprising one single component, not leading to credits.
EC	ENHANCE Course – description of implementation of an ENHANCE ILO comprising one single component, leading to credits.
EP	ENHANCE Programme – description of implementation of an ENHANCE ILO comprising multiple components, leading to credits.
ILO instance	ILO with assigned start date and, possibly, end date, the number of places and scholarships available per partner (if applicable), and, for programmes, set of learning units.
ECert	ENHANCE Certificate – a document (printed or digital) issued by an ENHANCE member university on behalf of ENHANCE confirming an ENHANCE credential.
UCert	University Certificate – a document (printed or digital) issued by an ENHANCE member university on its own behalf confirming a university credential.

## 6.2 Actors

### Non-human entities

The list of non-human entities is as follows:

- **[E] ENHANCE Alliance:** network of ENHANCE members and related bodies and boards. For processes that require central coordination, the entity is indicated as ENHANCE.
- **[U] ENHANCE university:** higher education institution that is either a full member or an associated partner of the ENHANCE Alliance.
- **[LU] lead university:** ENHANCE university that coordinates a particular LO and issues formal documents certifying the learning outcomes acquired by the learners.
- **[PU] participating university:** ENHANCE university that participates in the development or implementation of a particular LO.
- **[RU] receiving university:** ENHANCE university that hosts the learners during a particular learning activity (either in-presence or online).
- **[SU] sending university:** ENHANCE university that sends the learner to participate in a learning activity (either in-presence or online) at another university.
- **[EX] external entity:** if a learner is not affiliated with any ENHANCE university, the organizational affiliation is indicated as external.

The relations between particular non-human entities are as follows:

- $LU \subset U$  : the set of lead universities is a subset of all ENHANCE universities
- $PU \subset U$  : the set of participating universities is a subset of all ENHANCE universities
- $RU \subset U$  : the set of receiving universities is a subset of all ENHANCE universities
- $RU \subset PU$  : the set of receiving universities is a subset of a set of participating universities – which means that receiving universities belongs to participating universities

### Human entities

Human entities involved in the development and implementation of a particular LO are usually associated with an institution (university) that is either a member or an associated partner of the ENHANCE Alliance. The list of human entities, along with their institution associativity, is as follows:

- **[L] Learner [U/EX]:** participates in an ILO; can be a BSc, MSc, PhD or postgraduate student, external life-long-learner, academic/administrative staff, etc.
- **[AC] Academic Coordinator [LU]:** member of academic staff; coordinates the academic processes related to the development and implementation of an ILO.
- **[EO] Education Officer [U]:** person responsible for the approval, collection, review and harmonization of ILOs as well as the facilitation of ILOs on the decentral level.
- **[EOS] Education Officers Coordinator [E]:** EO centrally coordinating the administrative processes related to the approval, collection, review and harmonization of ILOs.
- **[CO] Communication Officer [U]:** person supporting the promotion and dissemination of ILOs.
- **[T] Teacher [U]:** runs a specific learning activity.
- **[CS] Certificate signer [LU]:** person/function responsible for signing the certificate.

## 7. Processes – description

The description of processes given below, in particular their graphical presentation, should be considered as a basis for discussion between WP8 and WP9. The proposed solutions will need to be adjusted and finetuned during the upcoming year when the actual development of IT tools and services supporting the Innovative Learning Campus will take place.

### 7.1 Process overview

In the following the basic process steps are briefly summarised:

#### Developing ILOs:

- **Creation [AC/EO]:** creating the description of a particular ILO, the result of the process is the ILO specification.
- **Adjustment [AC/EO]:** modifying an existing ILO, resulting in the modification of the ILO description (e.g. number of ECTS, learning outcomes).
- **Approval [EO; if applicable]:** adoption of a newly created or changed ILO (only applicable for an ENHANCE course, an ENHANCE programme or any fee-based ILO) by Education Officers – all other ILOs are approved by default.

#### Preparing ILOs:

- **Collection [AC/EO]:** creating specific ILO instances in the ILO catalogue, based on the approved ILO specification; the collection of ILO instances is conducted in four collection rounds per academic year.
- **Internal review [EO; optional]:** the ILO instance from one university being reviewed internally by its local Education Officer.
- **External review [EO]:** the ILO instances from all universities being reviewed by all Education Officers who a) provide feedback/comments (if needed), b) choose the ILOs they want to offer to their learners, and c) indicate whether they can provide funding for the places they have selected for their learners (if a physical mobility is involved).
- **Harmonization [EO]:** modifying ILO instances by integrating the results from the internal and external review, centrally coordinated by the Education Officers Coordinator.
- **Publication [EO]:** all ILO instances that have been collected during one collection round in the ILO catalogue become publicly visible at the same time on an agreed upon date.

#### Implementing ILOs:

- **Promotion [EO/CO]:** informing about and advertising ILOs.
- **Application [AC/EO]:** collecting applications of candidates for an ILO.
- **Selection [AC/EO]:** selecting candidates for an ILO.
- **Teaching [T]:** running the learning activities the ILO is composed of.
- **Certification [AC]:** issuing a formal document certifying the learner's participation in or successful completion of an ILO and, if applicable, the required information needed to support the type of certification.

#### Monitoring & Evaluating ILOs:

- **Evaluation [AC/EO]:** evaluating ILO according to local quality assurance processes (university ILO) or ENHANCE quality assurance processes (ENHANCE ILO).
- **Monitoring [AC/EO]:** filling in the ENHANCE Monitoring Matrix with all required data.

If there is no subsequent edition planned the ILO gets closed. Otherwise, it can be either re-collected or adjusted (if needed). In the former case, the LO is modified, and a new edition is initialized with the creation of a new ILO instance. In the latter case, the ILO description is first modified, approved, and then a new edition is initialized.

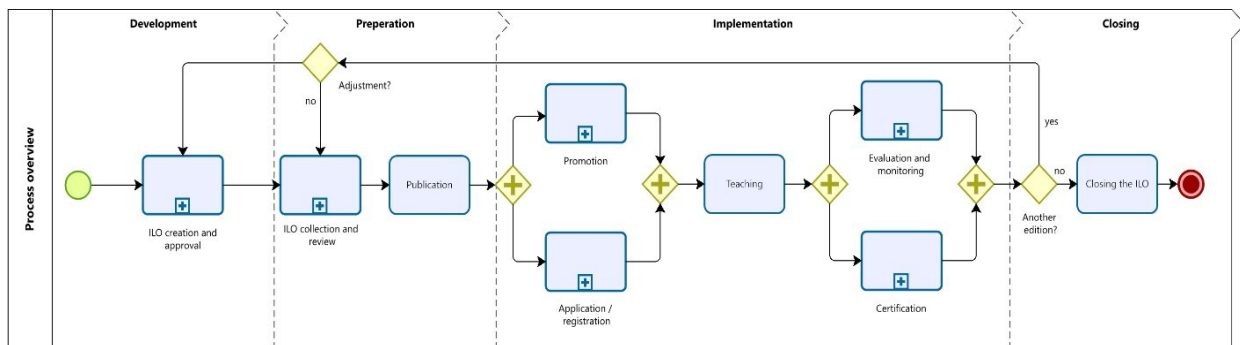


Figure 1 – Process overview

## 7.2 Developing ILOs

The process starts with establishing the details of the ILO between the Academic Coordinator and, if applicable, the teachers (if different from the Academic Coordinator). After having set these details, the **ILO specification is created** in the administration portal of the ILO catalogue by the Academic Coordinator (alternatively, the Education Officer).

In the case of a multi-component ILOs (programmes), the potential participation of assigned components must be agreed between the Academic Coordinator of the programme and the teachers/Academic Coordinators of the respective components. The description is then created, and the initial offer of components collected from ENHANCE member universities are assigned to it. Components of an ENHANCE programme have to be other ILOs that are available in the ILO catalogue.

In the case of a single-component ILO the Academic Coordinator and the teacher are (mostly) the same person. The ILO description is then based on the single component it is composed of.

ENHANCE programmes and ENHANCE courses (= all credit-bearing ILOs that lead to an ENHANCE certificate) all require **approval of the ILO specification** by the body of Education Officers before an ILO instance can be created from that particular ILO. The ILO specification for all types of university ILOs as well as ENHANCE trainings are approved by default. They are however part of the review process explained in 2.3.

If approval of an ENHANCE programme or course is denied, the ILO is either discarded or adjusted. In the latter case, the ILO description is first modified and then needs to be approved again. Otherwise, the ILO will be deleted from the ILO catalogue.

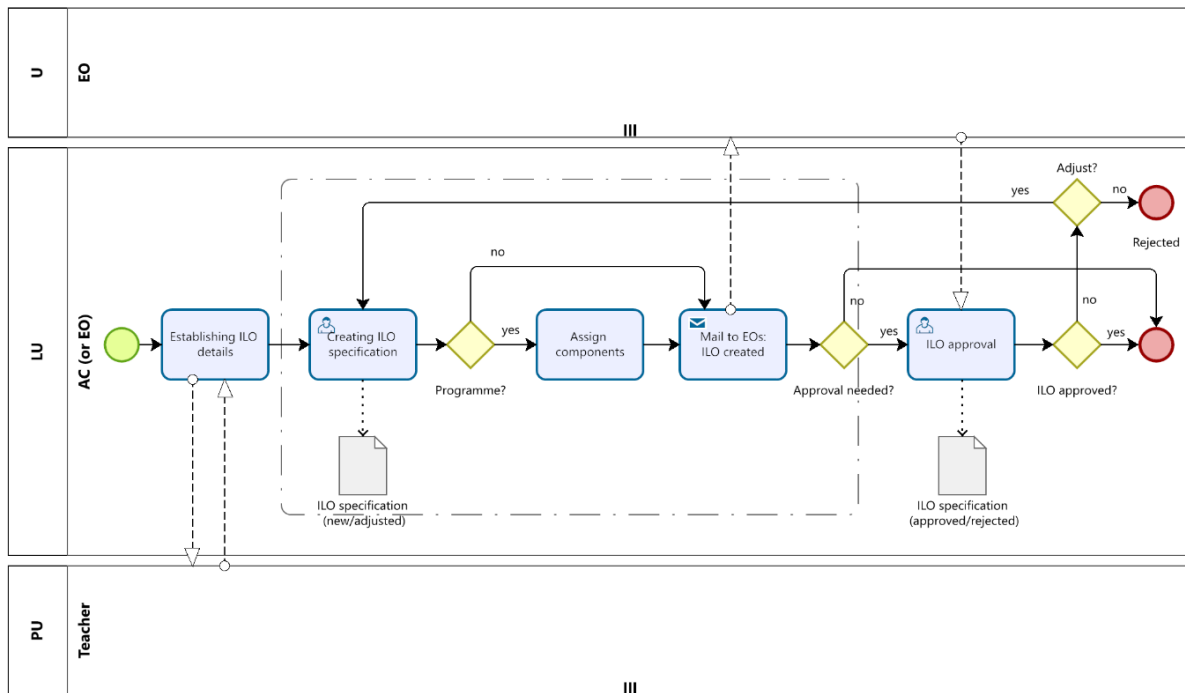


Figure 2 – Developing ILOs

## 7.3 Preparing ILOs

The process of **collecting ILOs** by creating specific ILO instances in the ILO catalogue is coordinated by the Education Officers Coordinator. The process starts with the setting all required information for the collection round and is then triggered by an email to all local Education Officers (in addition: Work Package Leads and the Operational Office). This email includes an information package with instructions on the collection process and deadlines for the current collection round.

ILO instances are collected in the ILO catalogue by creating them from an existing ILO specification. If the ILO does not require approval by Education Officers, the creation of the ILO specification and the ILO instance can be done in one step. If prior approval is required (which is the case for any credit-bearing ENHANCE ILO) the ILO instance can be created together with the specification, but will only become visible after approval of the specification has been granted. An ILO instance is an ILO with an assigned start date and end date, the number of places and scholarships available per partner (if applicable), and, for programmes, an updated set of its components. Whenever an ILO instance is created by an Academic Coordinator, the system sends an automatic email to the local Education Officer of the same university.

After the deadline for the creation of ILO instances during a collection round, the **review process** starts. Some partners might wish to have their set of ILOs first reviewed internally by the local Education Officer. Once the internal collection and review are completed, the Education Officers Coordinator distributes the list of all collected ILO instances among all Education Officers and the external review process starts. The offer is being reviewed by all partners' Education Officers who a) provide feedback/comments (if needed), b) decide whether there are any ILOs they do not want to offer to their learners, and c) indicate whether they can provide funding for the places offered for their learners if a physical mobility is involved. For scalability reasons, the review process should focus on new ILOs only and on those that include a physical mobility funded through Erasmus+ funds (in case of Switzerland Movetia) or other means. Therefore, it will be necessary that the ILO catalogue allows for an easy differentiation between a newly created ILO, an ILO that includes funding, and ILOs that have been already offered in the past and do not include any funding.

Towards the end of the collection round, Education Officers meet for the **harmonization** of the whole offer, which is coordinated by the Education Officers Coordinator. The aim of this meeting is to get an overview of all ILOs that have been collected and identify potential gaps (e.g. not enough ILOs offered to a particular target group) or overlaps (e.g. two ILOs with similar target groups have been schedule with parallel in-presence phases), to discuss and integrate the feedback received during the review process, and to ensure consistency of all ILOs with the ENHANCE framework. Finally, all ILO instances that have been collected during one collection round in the ILO catalogue become **publicly visible** on the same commonly defined date.

In justified exceptional cases it is also possible to create ILO instances outside of these defined time periods. This must never be done for an ILO that targets students and includes a physical mobility.

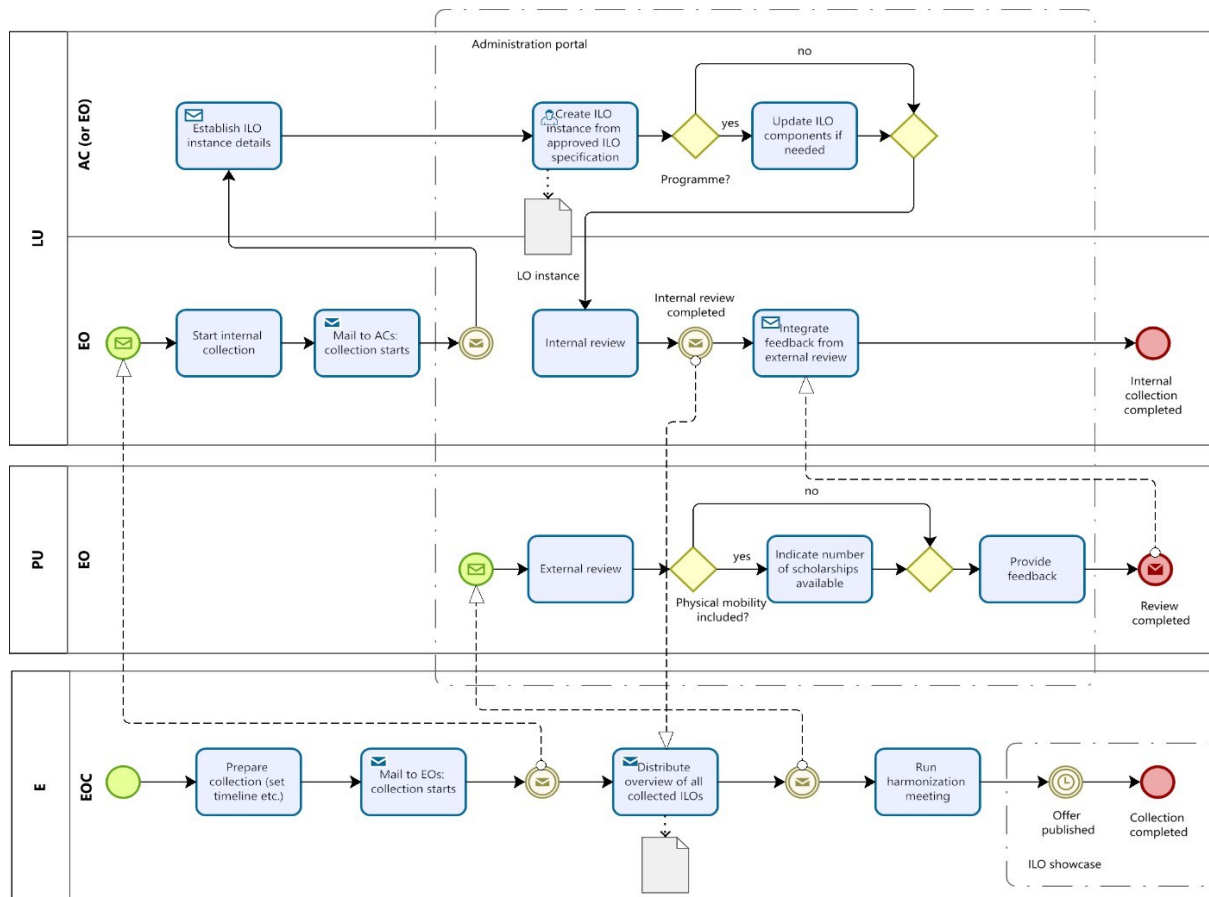


Figure 3 – Preparing ILOs

## 7.4 Implementing ILOs

The ILO implementation starts with the **promotion campaign** immediately after the ILOs from the latest collection round have been published in the ILO catalogue. The ILO catalogue is then broadly advertised both by the central ENHANCE Communication Officer as well as the local Communication and/or Education Officers at each university. In addition, a more targeted communication of individual ILOs might happen in case a certain threshold of learners needs to be reached for a successful implementation. Therefore, promotional material should be provided and stored in a central repository, which would preferably be the ILO catalogue but the ENHANCE Cloud could be used as an interim or alternative solution. The promotion of any individual ILO on the local level should preferably be triggered by the local Education Officer and not directly by the local Communication Officer. In any case, the local Education Officer needs to be informed about any targeted promotion activities of an individual ILO.

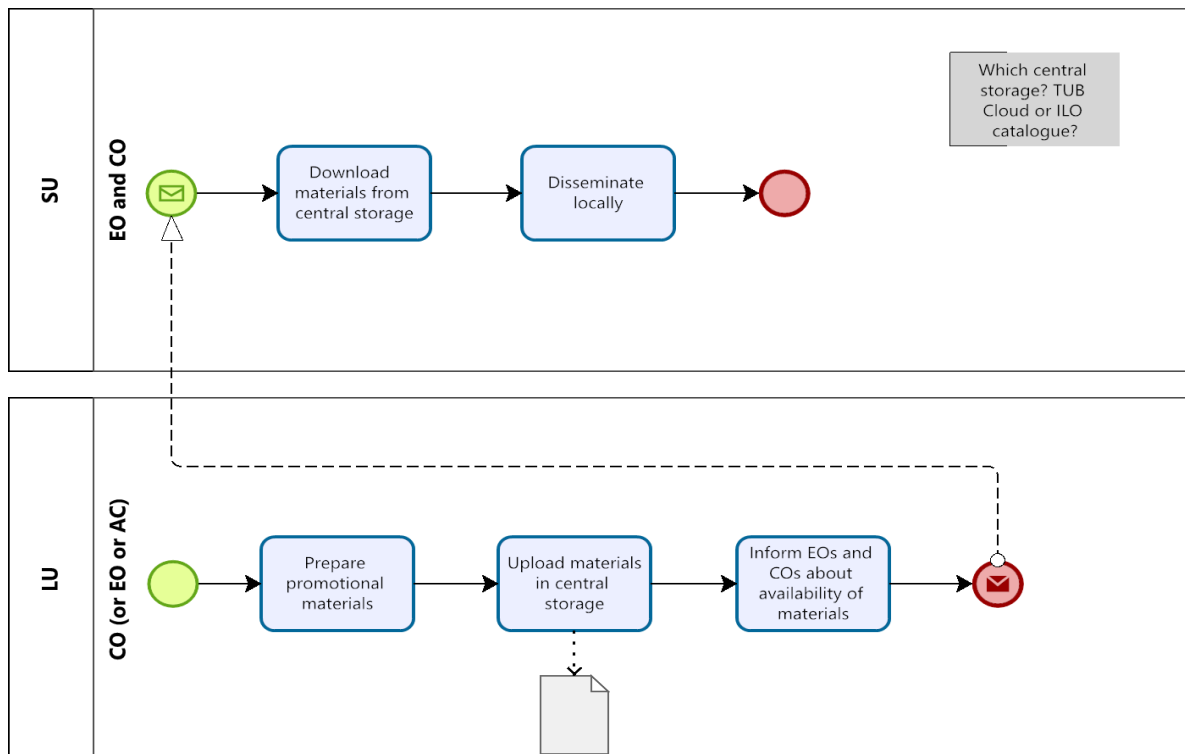


Figure 4 - Promotion

In parallel to the promotion campaign, the **application process** starts. Depending on the type of ILO, different workflows apply. While for ENHANCE ILOs (a) the registration process is happening centralized directly in the ILO catalogue, university ILOs (b) will usually apply a decentral registration on the local university level:

- In the case of a centralized registration process, learners fill in the registration form directly within the ILO catalogue and submit it to the Lead University, under responsibility of the local Education Officer/Academic Coordinator of the Lead University.
- If registration happens locally, the registration button in the ILO catalogue will redirect the learner to an external registration form or a webpage with further information on the registration process. If a decentral registration/application is applied, all other subsequent process steps need to be handled on a decentral level.

The application of a decentral registration and further management of ILOs on the decentral level has some serious implications especially with regards to the monitoring of ILOs as none of the learners' data will be available on the ILO catalogue. In addition, it is related to the (strategic) question to which extent the ILO catalogue should serve the function of showcasing university ILOs. This question, however, needs to be discussed further on the project leadership level in relation to the Workplan and further developments concerning the Alliance's educational offer.

Once the collection of applications has been completed, the learners are selected and notified. Whenever scholarships by the sending university are provided, the sending university has to be consulted before the learners are informed of the outcome of the selection process to determine whether the selected learners are eligible for funding.



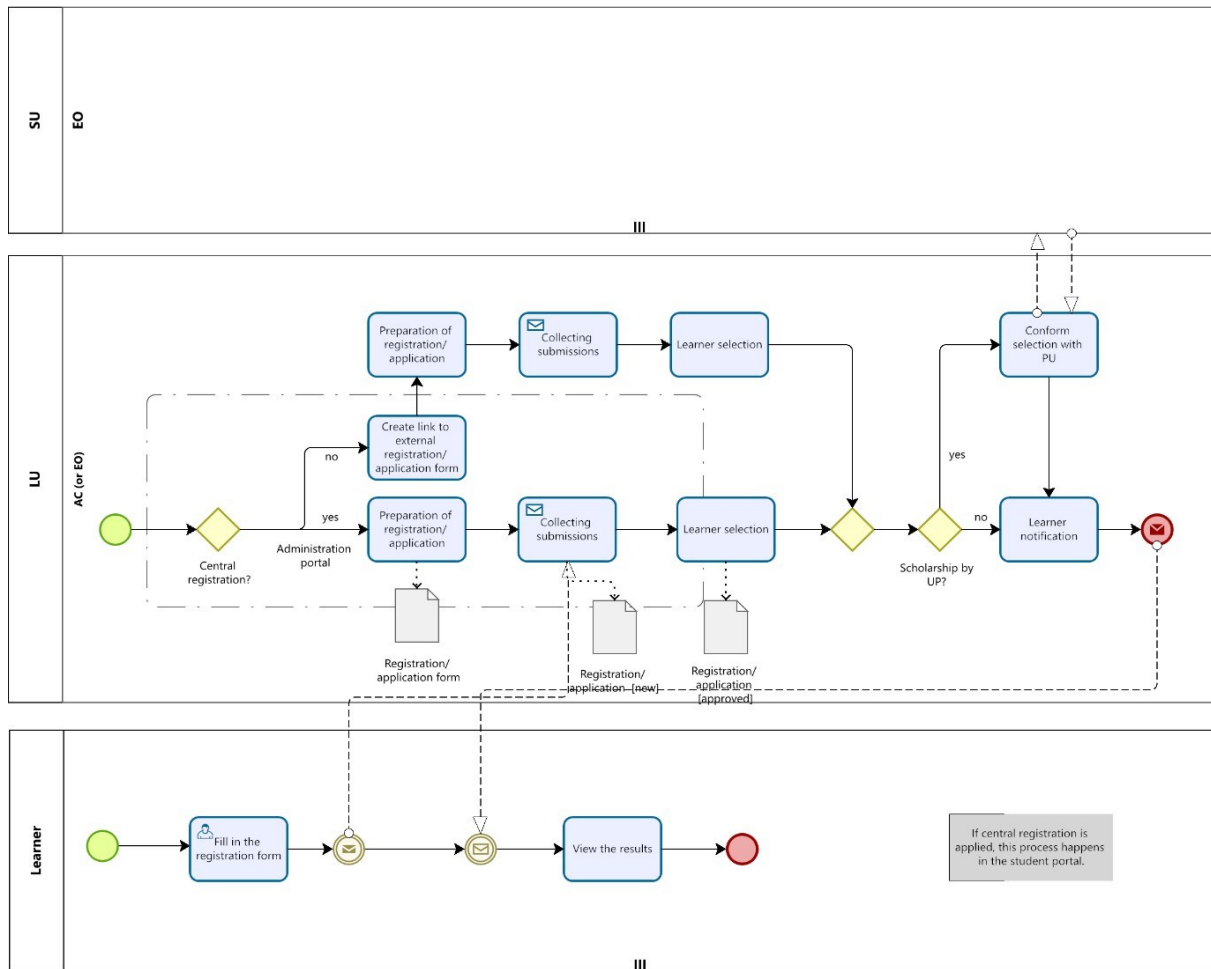


Figure 5 – Registration

ENHANCE programmes add an extra level of complexity to the registration process and it is still not clear how the distribution of places between programmes and its components could be organized in the most efficient way – particularly if the components are ILOs that are as well open for individual registration for learners who are not enrolled in the programme. In general, an ENHANCE programme should never allow more admissions than the programme component with the lowest capacity has places available.

The easiest administrative and technical solution is to leave responsibility for the process in the hand of the learners themselves by having them to register for the different components individually without a central programme registration as it has been handled in the past project period. However, this solution has proven as problematic both for the learners, who experienced no guidance within their participation in the programme, as well as from the administrative perspective as it was impossible to track who is actually interested or even enrolled in an ENHANCE programme. Therefore, it was decided to implement a central programme registration that clearly indicates that learners still need to register for the different components individually. The central registration would allow the Academic Coordinator (or the Education Officer) of the programme to provide a closer guidance to the learners. In addition, if the registration deadline for ENHANCE programmes would be scheduled on a (perhaps even central) earlier date than for their various components, number of places available in the components could be decreased in accordance with the admissions granted for the programme. As the whole concept of ENHANCE programmes is still under development and thus only very few learners have been recruited in the past years, their implementation can be considered a long-term goal with subordinate priority in comparison to other ILOs that already attract very large numbers of learners.



Once learners have registered to the ILO, the actual teaching period starts by **running the learning activities** the ILO comprises. Since this is done in accordance with the local regulations at each university and using local resources, all details regarding course delivery and, if applicable, assessment are defined locally. Depending on the set-up and requirements of each individual ILO, a registration in the local Campus Management System (CMS) or Learning Management System (LMS) might be required (in many cases the registration in the latter requires an account in the first). Consultation with the Educational Officer can be done to discuss alternatives if the local CMS and LMS are not feasible to use. A technical support through the ILO catalogue is not foreseen in the process step.

The last step of the ILO implementation is the **certification process**. Again, this process is subdivided into two different flows depending on whether a university certificate or an ENHANCE certificate will be issued. University certificates (e.g. transcript of records, performance record, certificate of completion, academic certificate etc.) will be issued in accordance with local regulations and guidelines after a learner has successfully completed all learning activities and assessments of the respective university ILO.

The issuance ENHANCE certificates on the other hand can be triggered in two ways:

- In the case of single component ILOs or programmes that only comprise learning units from one university, the trigger is the fact that the current ILO edition has been finished. In that case the Academic Coordinator or the Education Officer generates the list of learners who have successfully participated in the edition.
- In the case of programmes that comprise learning units from various universities, it is more difficult to track the learner's progress. In this case the process is triggered by a request of the learner to have the certificate submitted. To receive the certificate, the learner must provide proof to have all learning units completed by handing in the respective certifications. Alternatively, the Academic Coordinator of a learning unit could confirm a learner's successful completion.

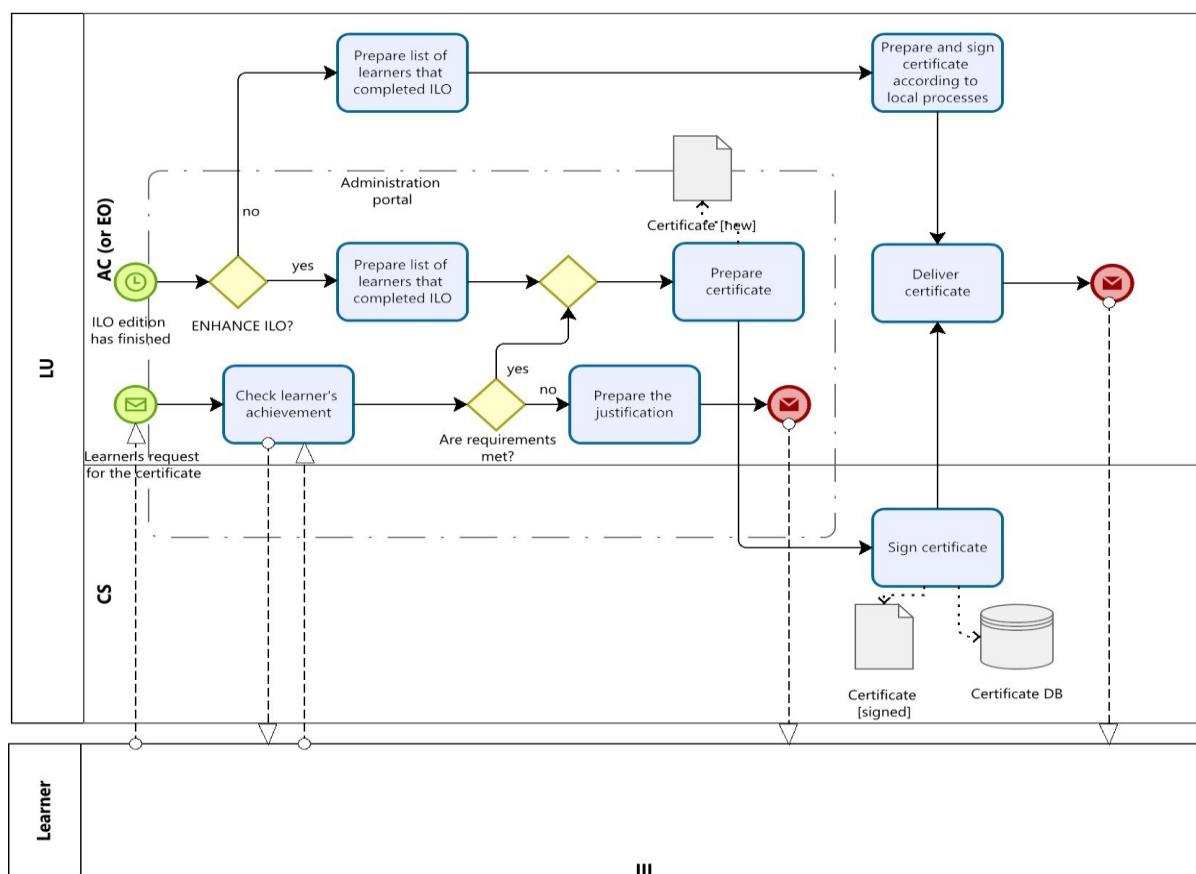


Figure 6 - Certification

The implementation process ends with the two parallel processes of **evaluation and monitoring**. For ENHANCE ILOs that have been implemented centrally, all required monitoring data should already be available. For university ILOs this data needs to be added by the Academic Coordinator and Education Officer manually. The evaluation of ENHANCE ILOs happens through a central evaluation form. An email with a link to the form is then sent to all learners that have completed the ILO. University ILOs run on the decentral level on the other hand get evaluated in accordance with local processes and guidelines (if applicable).

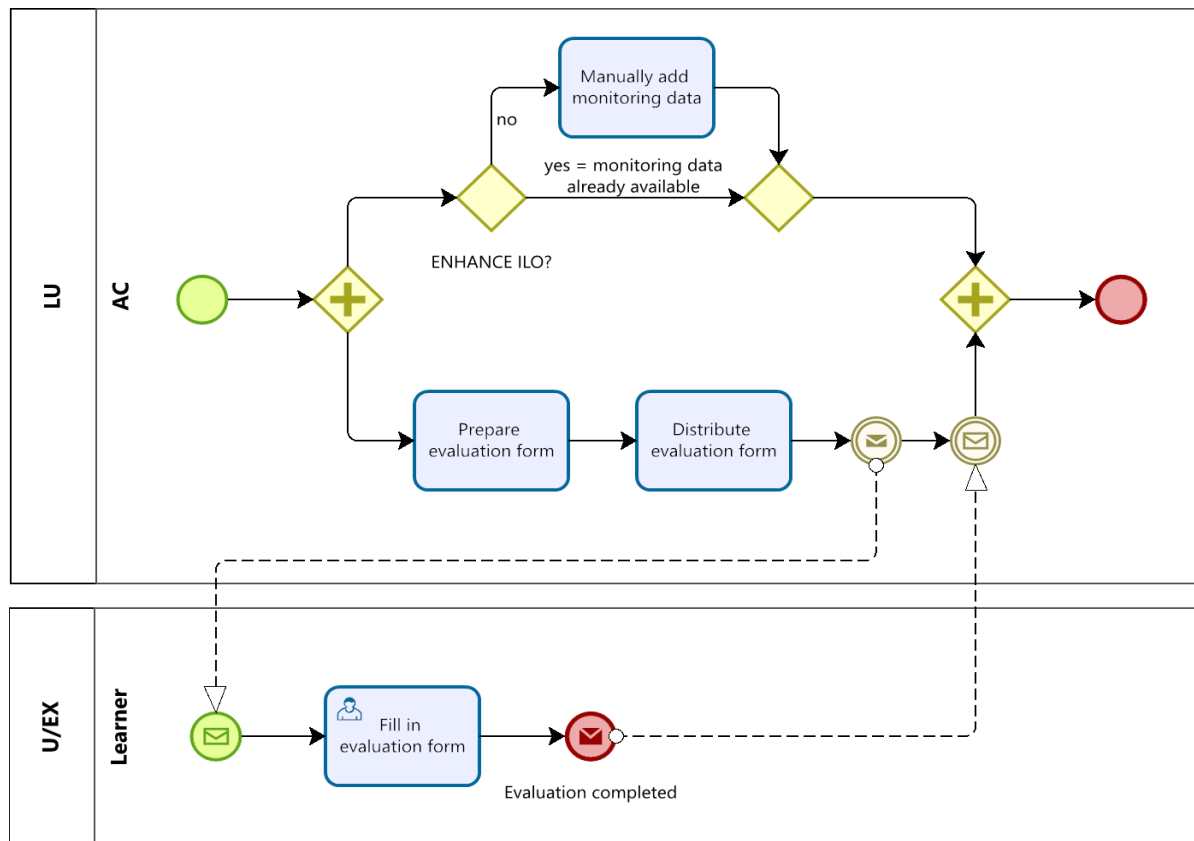


Figure 7 – Evaluation and monitoring

## 8. Processes – timeframes and deadlines

As part of our work to streamline and harmonize the processes around the creation and implementation of shared ILOs, we agreed on some common timeframes and deadlines for the collection, review, harmonization and publication of ILOs in the ILO catalogue. These are briefly outlined on the following:

- The ENHANCE academic year runs from September to August and is split up in two term and four seasons:
  1. Fall Term, September – February, including the two seasons:
    - Autumn Season, September – November
    - Winter Season, December – February
  2. Spring Term, March – August, including the two seasons:
    - Spring Season, March – May
    - Summer Season, June – August
- The collection of ILOs is conducted in four collection rounds per year:

1 <sup>st</sup> Collection Round (regular): Autumn + known Winter ILOs (01.09. – 28.02.)		2 <sup>nd</sup> Collection Round (last-minute): Winter ILOs (01.12. – 28.02.)	
Beginning of collection	early April	Beginning of collection	early August
Deadline for collection	mid-May	Deadline for collection	late August
Deadline for review	end of May	Deadline for review	early September
Publication	early June	Publication	mid-September

3 <sup>rd</sup> Collection Round (regular): Spring + known Summer ILOs (01.03. – 31.08.)		4 <sup>th</sup> Collection Round (last-minute): Summer ILOs (01.06. – 31.08.)	
Beginning of collection	early October	Beginning of collection	mid-January
Deadline for collection	mid-November	Deadline for collection	mid-February
Deadline for review	end of November	Deadline for review	end of February
Publication	early December	Publication	early March

ILOs that overlap between two terms have to be collected in one of the two collection rounds for the earlier term. They may remain visible in the ILO catalogue for both terms.

## 9. Quality Assurance/Enhancement

Although not all innovative learning opportunities offered by ENHANCE within its Innovative Learning Campus lead to micro-credentials, it can be observed that:

- micro-credentials are the most complex components of this offer,
- quality assurance of micro-credentials is discussed in several reports and other publications (see Section 9.4).

Therefore, recommendations regarding quality assurance for micro-credential can be used as inspiration and guidance for the development of methods and tools for evaluation and enhancement of the quality of the entire offer of ENHANCE innovative learning opportunities (showcased in the ENHANCE Innovative Learning Campus catalogue).

The system of quality assurance for innovative learning opportunities at ENHANCE includes:

- an external component (external to ENHANCE), aimed at the entire offer of ENHANCE innovative learning opportunities,
- an internal component, aimed at both the entire offer of ENHANCE innovative learning opportunities and its individual components.

### 9.1 External quality assurance

As stated in Annex 1 of the EU Council Recommendation on micro-credentials<sup>35</sup>, external quality assurance should be based primarily on the assessment of providers rather than individual courses. Taking into account that innovative learning opportunities are offered jointly by ENHANCE (are part of the ENHANCE educational offer/ENHANCE EEP Ecosystem/ENHANCE Innovative Learning Campus), this can be interpreted in two ways:

- ENHANCE Alliance is subject to assessment,
- individual members of ENHANCE, conducting learning activities and issuing micro-credentials and other credentials on behalf of the ENHANCE Alliance are subject to assessment.

An assessment at the level of the ENHANCE Alliance took place in the form of the external quality assurance evaluation conducted by NEHEM and reported as Deliverable D1.14 in October 2023. The aspects taken into account in the NEHEM report are: overall perspective, impact on the wider higher education system, governance and cooperation, joint education and mobility, society and economy, research and innovation.

In the future, when the development and implementation of ENHANCE innovative learning opportunities reaches a higher level of maturity, an audit conducted by a specialised international agency dealing with accreditations in higher education can be considered.

Regarding the assessment of individual members of ENHANCE (universities), conducting learning activities related to innovative learning opportunities and issuing credentials on behalf of Alliance, these institutions are subject to national accreditation processes. Such processes vary across countries, but share common characteristics outlined in Standards and Guidelines for Quality Assurance in the European Higher Education Area<sup>36</sup>. It should also be noted that all ENHANCE members are recognised

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<sup>35</sup> Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability; Official Journal of the European Union, 27.06.2022; [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627\(02\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627(02)).

<sup>36</sup> Standards and Guidelines for Quality Assurance in the European Higher Education Area, ENQA, 2015.

for their high quality of research and education, as documented by their respective positions in international and national rankings.

## 9.2 Internal quality assurance

### Individual innovative learning opportunities

The internal quality assurance for a particular innovative learning opportunity, conducted within ENHANCE, should cover the following elements:

- the overall quality of a particular innovative learning opportunity itself, based on Standards and Guidelines for Quality Assurance in the European Higher Education Area, where applicable,
- the quality of teaching and learning activities conducted to implement this learning opportunity,
- learners' feedback on the learning experience leading to the related credential,
- relevant stakeholders' feedback (responsible or supporting instructors, professional organisations, etc.).

The monitoring and evaluation activities should lead to the continuous improvement of the learning opportunity.

For the assessment and enhancement of the overall quality of a particular innovative learning opportunity itself, the two-level mutual trust-based quality assurance scheme is adopted:

- at the university level: a university that coordinates the development and implementation of a particular innovative learning opportunity<sup>37</sup> applies its internal quality assurance procedures and structures to the proposal it submits to ENHANCE,
- at the Alliance level: the body composed of Education Officers makes decisions regarding the inclusion of a particular innovative learning opportunity proposed by one of its members to the joint ENHANCE offer showcased in the Innovative Learning Campus Catalogue, based mainly on the compliance with the formal requirements (specification of the learning opportunity and related credential – see Section 5.1) and ENHANCE goals<sup>38</sup>.

The assessment and enhancement of the quality of learning activities conducted to implement a particular innovative learning opportunity also relies on mutual trust. Each university that carries out learning activities related to the innovative learning opportunity in question is responsible for the application of its internal quality assurance system – adjusted, if necessary to deal with specific features of innovative learning opportunities – to cover these learning activities.

So far, no systematic process to collect – through relevant regularly conducted surveys – and examine learners' feedback on the learning experience (in particular, their level of satisfaction) has been developed. However, we encourage informal conversations and feedback through testimonials published by learners on social media and other communication channels.

The development of methods and tools for the collection of feedback from learners and other stakeholders will be developed following the adoption of the basic concepts of the Framework. An essential aspect of this process is the collection of feedback on inclusivity of ENHANCE innovative learning opportunities – the entire offer and its individual components. Appropriate measures to

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<https://www.enqa.eu/esg-standards-and-guidelines-for-quality-assurance-in-the-european-higher-education-area/>.

<sup>37</sup> A learning opportunity coordinated by a particular member of ENHANCE may include learning activities conducted by other members of ENHANCE.

<sup>38</sup> In the future, compliance with the workplan for the development and implementation of joint innovative learning opportunities, to be adopted by the Steering Committee, will also be examined.

obtain feedback from various underrepresented groups will be developed and implemented in cooperation with the ENHANCE Diversity Office.

### **Entire offer of innovative learning opportunities**

The following mechanisms contributing to the internal quality assurance for the entire offer of ENHANCE innovative learning opportunities (ENHANCE Innovative Learning Campus) are envisioned and will be implemented:

- an annual report documenting the development and implementation of innovative learning opportunities (including relevant quantitative and qualitative indicators); such a report will contain observations and recommendations on necessary adjustments and refinements of processes related to the development and implementation of innovative learning opportunities,
- the workplan for the development and implementation of ENHANCE innovative learning opportunities, to be adopted by the Steering Committee in June 2025, and updated periodically; this workplan will define more strategic directions for the development and implementation of innovative learning opportunities.

In order to examine the progress in the implementation of innovative learning opportunities, we have developed a dedicated tool – Monitoring Matrix. We use this tool to collect various types of information and produce statistics that characterise the implementation of our innovative learning opportunities (related learning activities), such as the number of applications, the number of actual participants etc. This makes it possible to draw conclusions on interest in various formats of learning opportunities, but also – as a by-product of the process of filling in the Matrix by Education Officers – identify problems related to the implementation of learning activities and formulate recommendations regarding the processes and workflows that are part of our Framework for innovative learning opportunities.

### **9.3 Next steps**

Following the adoption of the basic concepts of the ENHANCE framework for innovative learning opportunities and the workplan for the development and implementation of ENHANCE innovative learning opportunities by the Steering Committee, our activity will focus on:

- development of the principles and guidelines that will be used by the Education Officers when deciding on the inclusion of learning opportunities proposed by ENHANCE members in the joint offer of innovative learning opportunities,
- wider engagement of the ENHANCE community, in particular beneficiaries of the ENHANCE offer of innovative learning opportunities in the process of its quality evaluation and enhancement; this would include the development and implementation of a systematic process to collect – through surveys – and examine learners' feedback on their experience (their level of satisfaction etc.); the development of a dashboard or visualisation tool to enable reporting of aggregated, anonymised statistical data about each learning opportunity can also be considered,
- peer-reviewing by other member universities based on the agreed principles and guidelines,
- involvement of external stakeholders, including associated partners, in the process of evaluation the ENHANCE innovative learning opportunities, in particular their relevance for the labour market.

### **9.4 Quality Assurance – Resources**

- *Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability*, Official Journal of the European Union, 27.06.2022, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022H0627%2802%29>

- *A European Maturity Model for Micro-credentials in Higher Education: Whitepapers and Guidelines for a Strategy Workshop*, European Digital Education Hub, Publications Office of the European Union, 2024, doi: 10.2797/473787
- *Quality Assurance of Micro-credentials: Expectations within the Context of the Standards and Guidelines for Quality Assurance in the European Higher Education Area*, ENQA Occasional Paper, December 2023, <https://www.enqa.eu/publications/qa-of-micro-credentials>
- *Guide to Design, Issue and Recognise Micro-Credentials*, European Training Foundation, 2022, <https://www.etf.europa.eu/sites/default/files/2023-05/Micro-Credential%20Guidelines%20Final%20Delivery.pdf>
- *MICROBOL Working Group on Quality Assurance: Output document and recommendations*, June 2021, [https://microcredentials.eu/wp-content/uploads/sites/20/2021/07/Output\\_document\\_QA.pdf](https://microcredentials.eu/wp-content/uploads/sites/20/2021/07/Output_document_QA.pdf)
- *Standards and Guidelines for Quality Assurance in the European Higher Education Area*, ENQA, 2015, <https://www.enqa.eu/esg-standards-and-guidelines-for-quality-assurance-in-the-european-higher-education-area/>

## 10. Future developments

The ENHANCE Framework for Innovative Learning Opportunities presented in this document has been adopted as one of the ENHANCE+ milestones (MS18) by the Steering Committee through circular vote that took place at the beginning of February 2025.

In parallel with the last stage of the development of the Framework, the following activities were taking place:

- designing the templates that can be used by academics when submitting proposals for various categories of ENHANCE innovative learning opportunities,
- development and dissemination of toolkits that would streamline the development of innovative learning opportunities (Toolkit for academics) and increase the number of beneficiaries of these learning opportunities (Toolkit for students),
- formulating the requirements for IT tools supporting processes related to ENHANCE innovative learning opportunities (such tools will be developed within WP9 T9.4).

Reaching the MS18 milestone does not end the work on the Framework. It will likely be adjusted in the coming months and years, taking into account, in particular:

- experience with using the Framework as a basis for the development and implementation of innovative learning opportunities, including feedback from the team working on the development of IT tools and services supporting processes related to ENHANCE innovative learning opportunities,
- further consultation with internal and external stakeholders, including associated partners; it is necessary to assure that adequate representation of underrepresented or diversity-focused groups within ENHANCE participates in such consultations,
- initiatives of institutions of the European Union and developments taking place within the European Higher Education Area that affect the 'European approach to micro-credentials'.

As stated in the description of task T8.1 in the Grant Agreements, we are required to test the Framework by applying it to selected innovative learning opportunities that were jointly developed and implemented in 2021-2023, and subsequently revised, scaled-up and offered in 2023-2024. This testing process should result in:

- refined templates of credentials, certifying the learners' achievements for at least 10 different offers, coordinated by at least 4 different partners, and representing the whole spectrum of ENHANCE innovative learning activities,
- any other necessary refinements, inspired also by developments within other European university alliances.



## Annex 1: Short-Term Educational Offers in the first ENHANCE project (2020-2023)

The development and implementation of short-term learning opportunities within the first ENHANCE project (2020-2023) were based on decisions made by the Steering Committee in 2021 and 2022, i.e.:

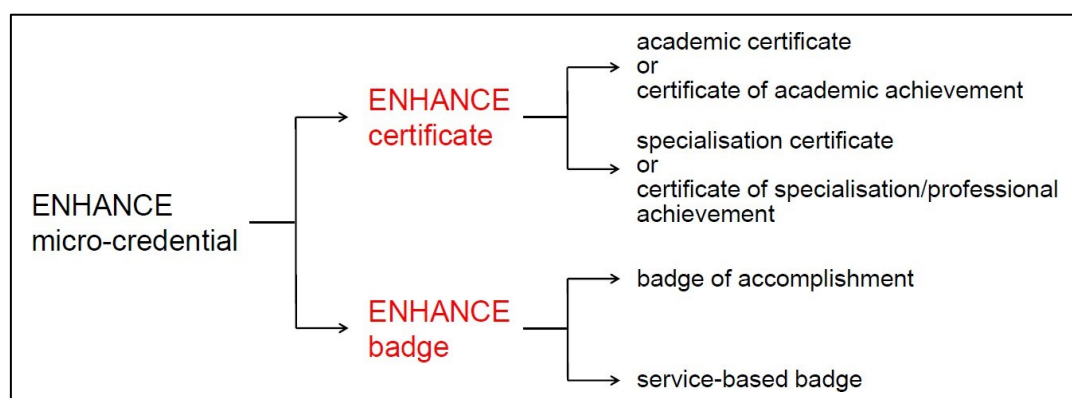
- the ENHANCE micro-credentials framework, adopted in June 2021<sup>39</sup>,
- workflow for ENHANCE micro-credentials, adopted in June 2022.

The ENHANCE micro-credentials framework of 2021 defines:

- basic concepts,
- typology of ENHANCE micro-credentials,
- micro-credentials template (description of constitutive elements of micro-credentials).

The ENHANCE micro-credentials framework of 2021 is mostly compatible with the “European approach to micro-credentials”, defined in the EU Council Recommendation of 2022 (the ENHANCE document was developed based on the proposal for this Recommendation, available in 2021).

The typology defined in the 2021 framework concerns the types (categories) of ENHANCE micro-credentials, as shown below.



The main difference between the two basic categories of ENHANCE micro-credentials (certificates and badges) lies in the approach to the assessment of learning outcomes. In the case of certificates, the assessment procedure is very formal, whereas badges can be awarded on the basis of rather non-formal assessment of learning outcomes or even on the basis of participation in learning activities. ENHANCE certificates are assigned ECTS points and in most cases also the EQF level (level in European Qualifications Framework). This is not the case for ENHANCE badges.

The workflow for ENHANCE micro-credentials, presented and adopted in June 2022, defines the decision-making processes related to the development and, to some extent, also to the implementation of ENHANCE micro-credentials.

Following the decisions of the Steering Committee, based on experience with the development and implementation of various forms of short-term learning opportunities offered to ENHANCE community

<sup>39</sup> “ENHANCE Micro-credentials: Certificates and Labels”, <https://enhanceuniversity.eu/strategic-papers-2-2>.

(certificate programmes, summer/winter schools, workshops, seminars, staff weeks, etc.), the templates of ENHANCE documents that certify small learning experience of learners and the guidelines on issuing such documents were developed. These templates and guidelines are still in use.

## Annex 2: ENHANCE Innovative Learning Campus Glossary

The ENHANCE Innovative Learning Campus Glossary has been developed based on the outcomes of the work done by the WP8 working group and its subgroups. Its draft version (9 September 2024) has been revised based on the outcomes of discussions that took place at the in-person WP8 meeting on 10-11 October 2024 at WUT.

As there are many different definitions of terms listed in the Glossary, given in different documents published by various international and national institutions and organisations, it has been necessary to decide on the primary source of reference. The EU Vocabulary – the list of terms defined and promoted by the European Commission (available in 29 languages), used in particular in the European Learning Model (ELM), has been selected as such a primary reference. ELM and the related EU Vocabulary are consistent with several key EU documents, including those that define ‘a European approach to micro-credentials’<sup>40</sup>. Another argument for this approach is that IT support tools for ENHANCE micro-credentials/innovative learning opportunities (to be developed within WP9 T9.4) will likely be based on ELM and related standards and tools.

The terms defined in the Glossary based on the EU Vocabulary are defined and explained in the following documents:

- *Introduction to the European Learning Model*, <https://europa.eu/europass/en/node/2128>,
- *ELM browser*, <https://europa.eu/europass/elm-browser/index.html>,
- *Stakeholder information about European Digital Credentials*, <https://europa.eu/europass/en/stakeholders/european-digital-credentials/stakeholder-information-about-european-digital-credentials>,
- *EU vocabularies: Common European Skills Data Space*, <https://op.europa.eu/en/web/eu-vocabularies/europasstable>.

In addition, the following documents have been used as a source of definitions and interpretations:

- *Erasmus+ Programme Guide*, Version 1 (2024): 28-11-2023, European Commission, [https://erasmus-plus.ec.europa.eu/sites/default/files/2023-11/2024-Erasmus%2BProgramme-Guide\\_EN.pdf](https://erasmus-plus.ec.europa.eu/sites/default/files/2023-11/2024-Erasmus%2BProgramme-Guide_EN.pdf),
- *Council Recommendation of 22 May 2017 on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning*, [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017H0615\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017H0615(01)),
- *Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability*, [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627\(02\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627(02)),
- *Guidance: Building a Taxonomy for Digital Learning*, Quality Assurance Agency for Higher Education (QAA), UK, 2020, <https://www.qaa.ac.uk/docs/qaa/guidance/building-a-taxonomy-for-digital-learning.pdf>,
- *The European Higher Education Area in 2020: Bologna Process Implementation Report*, Publications Office of the European Union, 2020,

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<sup>40</sup> *Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability*; Official Journal of the European Union, 27.06.2022; [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627\(02\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627(02)).

<https://op.europa.eu/en/publication-detail/-/publication/c90aaf32-4fce-11eb-b59f-01aa75ed71a1/language-en/format-PDF/source-183354043>,

- *Digitally enhanced learning and teaching in European higher education institutions*. European University Association, 2021, <https://eua.eu/downloads/publications/digihe%20new%20version.pdf>.

Remarks:

- Some terms defined in the Glossary look very formal. However, some of them will not be used for communication with our key stakeholders (students, other learners, teachers). They are essential for communicating with WP9 and IT experts developing the IT tools to support innovative learning opportunities and define the IT support requirements.
- Some terms might have already been defined at institutional or national level (e.g. micro-credential). These definitions may differ and finding a formulation that would comply with all these definitions might not be possible. In such a case, the following solution is proposed:  
The term is preceded by 'ENHANCE', implying that this has been adopted at the Alliance level, but does not necessarily comply with the "local" understanding.  
This solution would make it possible to correctly interpret the ENHANCE documents (certificates, etc.), in particular, for recognition purposes.

## Basic terms

term	definition / description	comment	see also
learning outcomes	statements of what a learner knows, understands and is able to do on completion of a learning process; learning outcomes are defined in terms of knowledge, skills and competences (responsibility and autonomy)	based on EQF (2017), Erasmus+ Guide (2024)	
learning opportunity	offer (by a higher education institution) to direct an activity that leads to learning outcomes; learning opportunity types listed in the EU Vocabulary include, inter alia: course, MOOC, challenge, internship, short learning programme, thesis, study visit	based on EDC, EU Vocabulary	learning outcomes
learning activity	process that leads to the acquisition of learning outcomes	based on EDC	learning outcomes
credential	a documented statement about a person's learning, including, where applicable, a set of learning outcomes acquired through a particular learning opportunity and related learning activities	based on ELM browser (definition of a digital credential)	learning outcomes, learning opportunity, learning activity
certificate	a document (printed or digital) confirming a credential		credential

## Learning

term	definition / description	comment	see also
mode of learning	term used in ELM / EU Vocabularies, where the following modes of learning are listed: blended, hybrid, online, presential, project based, research-lab based, work based; in specifications of ENHANCE learning opportunities / activities, the following modes of learning are used: <ul style="list-style-type: none"> <li>• in-presence,</li> <li>• online,</li> <li>• blended,</li> <li>• hybrid,</li> <li>• hybrid flexible</li> </ul>	based on EU Vocabularies	in-presence learning, online learning, blended learning, hybrid learning, hybrid flexible learning
in-presence learning	in-presence learning requires the physical presence of both instructor and learners in the same place		
online learning	in online learning the internet is used to carry out learning activities		
blended learning	learning in a combination of in-presence and online modes: all learners participate in some learning activities in-presence and in some other learning activities online		in-presence learning, online learning
hybrid learning	in hybrid learning some learners participate in learning activities in-presence, whereas at the same time other learners participate in the same learning activities in online mode; each learner has to select the mode of learning for all the learning activities	based on EUA (2021)	in-presence learning, online learning
synchronous learning / instructor-paced learning	in synchronous learning all learners participate in learning activities at scheduled times, although not necessarily in the same place (for hybrid mode) and interact in real-time with instructors and peers	based on QAA (2020)	
asynchronous / self-paced learning	in asynchronous learning learners learn at their own pace on their own schedules; this type of learning is typical for MOOCs	based on QAA (2020)	
formal learning	formal learning takes place in an organised and structured environment, specifically dedicated to learning, e.g., at a higher education institution; learning outcomes are formally assessed; formal learning results in academic credit, usually measured in ECTS points	based, partially, on Erasmus+ Guide (2024), EHEA (2020)	learning outcomes, assessment

non-formal learning	non-formal learning takes place through planned activities (in terms of learning objectives, learning time) at institution that offers some form of learning support; learning outcomes are not formally assessed and no academic credit is awarded	based on Erasmus+ Guide (2024), EHEA (2020)	learning outcomes, assessment
informal learning	informal learning results from daily activities and experiences related to work, family or leisure; it is not organised or structured in terms of objectives, time or learning support; it may be unintentional from the learner's perspective	based on Erasmus+ Guide (2024), EHEA (2020)	
collaborative online international learning (COIL)	online learning in an international setting, with interactive involvement of instructors and learners from different international and intercultural backgrounds in and outside the classroom	based on <a href="https://collab-edu.com/hub/coil/p/whatiscoil">https://collab-edu.com/hub/coil/p/whatiscoil</a>	online learning
service (based) learning	approach that integrates academic learning with community service or volunteer work; it is designed to provide students with opportunities to apply academic knowledge and critical thinking skills to real-world issues and community needs; service learning goes beyond mere volunteering by emphasising reflection and structured experiences that enhance both learning and civic engagement	based on UniRank; <a href="https://www.4icu.org/glossary">https://www.4icu.org/glossary</a>	

## Learning opportunities and their implementation

term	definition / description	comment	see also
ENHANCE innovative learning opportunity	any type of learning opportunity different from a degree programme <ul style="list-style-type: none"> <li>developed (or adjusted) by an ENHANCE university or jointly by two or more ENHANCE universities specifically for ENHANCE,</li> <li>approved by the relevant ENHANCE body (Education Officers),</li> <li>showcased in the ENHANCE Innovative Learning Campus catalogue;</li> </ul> examples: course, summer school, (micro-credential) programme, training, workshop		learning opportunity
template of learning opportunity	set of information describing the learning opportunity, including <ul style="list-style-type: none"> <li>name / title,</li> <li>category,</li> <li>target learners,</li> <li>learning outcomes,</li> <li>EQF level,</li> <li>learner workload,</li> <li>prerequisites / level of required pre-knowledge,</li> <li>type of credential / certificate,</li> <li>integration / stackability options,</li> <li>preliminary schedule of classes for instructor-paced courses;</li> </ul> in case of a (micro-credential) programme, the template includes also the general structure of learning units – components of this (micro-credential) programme		category of learning opportunity, learning outcomes, EQF level, learner workload, credential, certificate, integration / stackability options
specification of learning opportunity	template of learning opportunity filled in with data describing a particular learning opportunity		template of learning opportunity
instance of learning opportunity	description of the learning opportunity implementation, i.e., description of each learning activity which must be completed by the learner, including: its start and end date, name(s) of instructor(s), etc.		learning opportunity, learning activity



category of learning opportunity	<p>learning opportunities in ENHANCE Innovative Learning Campus are classified into the following main categories:</p> <ul style="list-style-type: none"> <li>• (micro-credential) programmes,</li> <li>• courses,</li> <li>• trainings,</li> <li>• tandems.</li> </ul>		learning opportunity, (micro-credential) programme, course, training, (language) tandem
(micro-credential) programme	set (sequence) of two or more related learning units, developed and implemented by an ENHANCE university or jointly by two or more ENHANCE universities, approved by the relevant ENHANCE body (Education Officers), offered to the ENHANCE community	'micro-credential' or 'certificate' in the name of this term is proposed to distinguish such a programme from a degree programme	learning unit
learning unit	course or other learning opportunity being a component of an ENHANCE (micro-credential) programme		learning opportunity, (micro-credential) programme
course(s)	<p>a broad category of learning opportunities in ENHANCE Innovative Learning Campus, subdivided into the following subcategories (used as filters in the ENHANCE Innovative Learning Campus catalogue):</p> <ul style="list-style-type: none"> <li>• instructor-paced courses, containing an essential component of synchronous learning,</li> <li>• self-paced courses: MOOCs and similar learning opportunities based on asynchronous learning,</li> <li>• summer &amp; winter schools,</li> <li>• design projects, competitions &amp; challenges</li> </ul>		learning opportunity, synchronous learning, asynchronous learning, summer & winter schools
summer & winter school(s)	<p>this subcategory of courses includes in particular:</p> <ul style="list-style-type: none"> <li>• short, usually one-week meetings that do not require any preceding or following learning activities,</li> <li>• learning opportunities supported by Erasmus+ BIPs that combine in-presence learning (physical mobility) with online learning preceding or following the in-presence activities; such schools can lead to micro-credentials</li> </ul>		learning opportunity, course

Blended Intensive Programme (BIP)	<p>learning opportunity / activity during which groups of learners undertake a short-term physical mobility abroad combined with a compulsory online component facilitating collaborative online learning exchange and teamwork;</p> <p>Erasmus+ BIPs can be used as instruments for funding short-term physical mobility for summer &amp; winter schools. If such an instrument is used, this should be stated in the title of the learning opportunity, with a note in brackets following the name of the learning opportunity.</p>	Erasmus+ Guide (2024)	learning opportunity, course
training(s)	<p>a broad category of learning opportunities in ENHANCE Innovative Learning Campus which includes, inter alia:</p> <ul style="list-style-type: none"> <li>• workshops,</li> <li>• various types of training, including staff weeks,</li> <li>• mentoring programmes,</li> <li>• some forms of service learning;</li> </ul> <p>these types of learning opportunities are not considered as subcategories of 'trainings' and are not used as filters in the ENHANCE Innovative Learning Campus catalogue, as is the case with learning opportunities in category 'courses'</p>		learning opportunity, service learning
(language) tandem(s)	<p>learning opportunity where learning takes place through regularly scheduled conversations in pairs of learners established voluntarily using a dedicated portal; for language tandems, intended to promote multilingualism, learners speak their native languages with English serving as an auxiliary, last-resort measure</p>		learning opportunity

## Credentials

term	definition / description	comment	see also
ENHANCE credential	credential awarded upon completion of learning activity / activities associated with an ENHANCE learning opportunity		credential, ENHANCE learning opportunity
ENHANCE micro-credential	ENHANCE credential awarded upon completion of learning activity / activities associated with an ENHANCE (micro-credential) programme or some other ENHANCE learning opportunity, compliant with the European approach to micro-credentials defined in the UE Council Recommendation (2022), in particular ‘European standard elements to describe a micro-credential’ (Annex I) and ‘European principles for the design and issuance of micro-credentials’ (Annex II)	based on Council Recommendation (2022) Erasmus+ Guide (2024)	
ENHANCE certificate of academic achievement	document confirming an ENHANCE micro-credential that is awarded to a student that has completed a specific academic (micro-credential) programme or course	it includes the ENHANCE logo, and the ENHANCE micro-credential “stamp”	ENHANCE micro-credential
ENHANCE certificate of professional achievement	document confirming an ENHANCE micro-credential that is awarded to a (lifelong) learner that has completed a specific continuing education (micro-credential) programme or course	it includes the ENHANCE logo, and the ENHANCE micro-credential “stamp”	ENHANCE micro-credential
ENHANCE badge	ENHANCE credential awarded based on not very formalised and usually highly individualised learning activities, such as service learning		ENHANCE credential, service learning
transcript of records / certificate of completion	credential (and related document) awarded upon completion of a learning activity / learning activities associated with a learning opportunity existing in the offer of an ENHANCE university opened to ENHANCE learners (showcased in the ENHANCE Innovative Learning Campus catalogue)		credential, assessment
ENHANCE certificate of participation	ENHANCE credential (and related document) awarded upon completion of a learning activity / learning activities associated with a learning opportunity offered to ENHANCE learners (showcased in the ENHANCE Innovative Learning Campus catalogue) that does not involve a formal assessment of learning outcomes; it certifies the attendance and, where applicable, specifies the intended learning outcomes	based on Erasmus+ Guide (2024)	ENHANCE credential, learning outcomes assessment
assessment (of learning outcomes)	process resulting in establishing the extent to which a learner has attained intended learning outcomes; may lead to a grade	based on EDC	learning outcomes, grade

assessment type	the list of types of assessment in the EU Vocabulary includes, inter alia: continuous evaluation, group performance, marked assignment, oral examination, peer assessment, portfolio, practical assessment, presentation, project work, quiz, written examination	based on EU Vocabulary	assessment
grade	result of assessment – a learner's score from within a grading scheme used by the institution that carries out the assessment	based on EDC	assessment
(learner's) workload	estimated workload typically needed for achieving intended learning outcomes defined for a learning opportunity; for students, the workload is usually measured in European Credit Transfer System (ECTS) points (1 ECTS point = 25-30 hours of work associated with all learning activities, including self-learning, taking place anywhere at any time); for lifelong learners, some other measure, such as Continuing Education Unit (CEU), can be used (1 CEU = 10 hours of instruction)		learning outcomes
EQF level (for a credential)	level in European Qualifications Framework (EQF) determined by comparing learning outcomes defined for a credential with the EQF level descriptors; EQF level 6 is assigned to a bachelor's degree (and learning outcomes of typical components of programmes leading to a bachelor's degree); EQF level 7 is assigned to a master's degree (and learning outcomes of typical components of programmes leading to a master's degree); EQF level 8 is assigned to a PhD degree (and learning outcomes of typical components of educational / research activities leading to a PhD degree)	based on EQF (2017)	learning outcomes
stackability (of a credential)	stackability means the possibility, where relevant, to recognise the considered credential as a part of a larger credential; for example, a credential awarded upon completion of a course or summer school being part of some (micro-credential) programme is stackable towards that micro-credential		credential
integration / stackability options	two integration / stackability options are considered <ul style="list-style-type: none"> <li>stand-alone, in principle no possibility to be recognised as a part of a larger credential,</li> <li>stackable towards another credential(s); where relevant, the name(s) of these credential(s) can be given</li> </ul>		credential

## Annex 3: Templates for ENHANCE credentials

The templates for following documents that confirm ENHANCE credentials awarded following the completion of learning activities associated with innovative learning opportunities are presented:

- Certificate of Academic/Professional Achievement for a „simple” ENHANCE micro-credential, awarded upon completion of a course,
- Certificate of Academic/Professional Achievement for a micro-credential awarded upon completion of an ENHANCE (micro-credential) programme,
- Certificate of Completion for a credit-bearing learning opportunity that does not lead to a micro-credential,
- Certificate of Participation for a non-credit-bearing learning opportunity.

The terminology compliant with the Framework is used. The page layout and graphical form of the printed documents are to be designed, taking also into account the recently adopted ENHANCE Style Guide.

## Certificate of Academic/Professional Achievement for a „simple“ ENHANCE micro-credential

*The following graphical elements should occur on this page:*

- *logo of ENHANCE*
- *logo of (ENHANCE) micro-credential (to be designed; if the design includes the logo of ENHANCE, the separate logo of ENHANCE might be unnecessary)*
- *logo of the issuing university (placeholder)*
- *logo of the supporting institution/organisation, e.g. NAWA (placeholder)*

### **CERTIFICATE OF «ACADEMIC/PROFESSIONAL» ACHIEVEMENT**

«issuing university»  
on behalf of the ENHANCE Alliance

certifies that

«first and last name»

born on

«birthdate»

has completed

«name of learning opportunity, e.g.  
course *Sustainable Innovation*,  
Summer School in Data Literacy, etc.»

jointly developed and implemented by  
«list of universities»

*this text is optional; should occur only for jointly developed learning opportunities*

«name and signature of issuer»

«place and date»

## CERTIFICATE SUPPLEMENT

### Learner

First and last name	«first and last name»
Date of birth	«birthdate»
Place of birth	«place of birth»
(optional) BS/MS student of	«university»

### Credential

Name/Title	Certificate of «Academic/Professional» Achievement
Learning activity/opportunity/ experience	«name of learning opportunity, e.g. course <i>Sustainable Innovation</i> , Summer School in Data Literacy»

<b>Awarding body</b>	«issuing university» on behalf of the ENHANCE Alliance
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<b>Date of issuing</b>	«date»
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<b>Workload</b>	«number of ECTS points, e.g. 5 ECTS or other measure of workload»
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<b>EQF Level</b> (optional)	«6, 7 or 8»
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### Learning outcomes

*The recommended method of formulating and presenting the learning outcomes for ENHANCE micro-credentials is to classify them, explicitly or implicitly, in three categories that are used in the definition of the EQF level descriptors, i.e. knowledge, skills and responsibility and autonomy .*

<b>Language(s) of instruction</b>	«language»
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### Form of participation in the learning activity

mode of learning	«in-presence, online, blended or hybrid»
duration	«beginning and end of learning activities»
number of contact hours	«number»

*For blended mode of learning, duration and number of contact hours are to be specified for both in-presence and online part).*

### Instructors (optional)

*Names of instructors, preceded by their titles (Dr., Prof. etc.), followed by their affiliations (not necessary, if all instructors affiliated with the university that issues the credential)..*

### Type of assessment

*Various types/methods of learning outcomes assessment can be adopted, depending on the learning outcomes, form(s) of learning activity and forms of participation in the learning activity. Whatever methods of learning outcomes assessment are adopted, they are to be specified.*

*For online assessment, the methods for supervision and identity verification during assessment are to be specified.*

## **Quality assurance of the credential and, where relevant, of the learning content**

*The following text (adopted if necessary) can be included here*

The two-level mutual trust-based quality assurance scheme has been adopted:

- at the university level: «issuing university» has applied its internal quality assurance procedures and structures to the proposal of «name of learning opportunity» it submitted to ENHANCE and to its implementation – the related learning activities,
- at the Alliance level: the body composed of Education Officers has made decisions regarding the inclusion of «name of learning opportunity» proposed by «issuing university» to the Innovative Learning Campus part of the joint ENHANCE educational offer, based on the compliance with the formal requirements and ENHANCE goals.

**Grade achieved** (optional)                      «grade»

## **Integration/stackability options** (optional)

*If the learning opportunity resulting in the awarded credential is an obligatory or elective component of a (micro-credential) programme leading to a “larger” credential, then it has to be specified here. The following text (adopted if necessary) can be used.*

«name of learning opportunity» is an obligatory/elective component of «name of (micro-credential) programme» coordinated by «university that coordinates the (micro-credential) programme» leading to «name of a credential issued upon completion of the (micro-credential) programme».

## **Further information** (optional)

*Any further information that would make the document more valuable/informative for the learner and other stakeholders (employers etc.) can be given, e.g.:*

- *partnership with external organisation (e.g. not limited to ENHANCE associated partners) in developing and/or implementing the learning opportunity,*
- *appreciation (employers or employers’ associations recommendation, professional associations acceptance for licensing purposes etc.),*
- *ISCED code, especially for learning opportunity intended for lifelong learners.*



## Certificate of Academic/Professional Achievement for a micro-credential awarded upon completion of an ENHANCE (micro-credential) programme

*The following graphical elements should occur on this page:*

- logo of ENHANCE
- logo of (ENHANCE) micro-credential (to be designed; if the design includes the logo of ENHANCE, the separate logo of ENHANCE might be unnecessary)
- logo of the issuing university (placeholder)
- logo of the supporting institution/organisation, e.g. NAWA (placeholder)

### **CERTIFICATE OF «ACADEMIC/PROFESSIONAL» ACHIEVEMENT**

«issuing university»  
on behalf of the ENHANCE Alliance

certifies that

«first and last name»

born on

«birthdate»

has completed

«name of learning opportunity, e.g.  
programme in Data Literacy, etc.»

jointly developed and implemented by  
«list of universities»

*this text is optional; should occur only for jointly developed learning opportunities*

«name and signature of issuer»

«place and date»

## CERTIFICATE SUPPLEMENT

### Learner

First and last name	«first and last name»
Date of birth	«birthdate»
Place of birth	«place of birth»
(optional) BS/MS student of	«university»

### Credential

Name/Title	Certificate of «Academic/Professional» Achievement
Learning activity/opportunity/ experience	«name of learning opportunity, e.g. programme in Data Literacy»

<b>Awarding body</b>	«issuing university» on behalf of the ENHANCE Alliance
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<b>Date of issuing</b>	«date»
------------------------	--------

<b>Workload</b>	«number of ECTS points, e.g. 5 ECTS or other measure of workload»
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<b>EQF Level</b> (optional)	«6, 7 or 8»
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### Learning outcomes

*The recommended method of formulating and presenting the learning outcomes for ENHANCE micro-credentials is to classify them, explicitly or implicitly, in three categories that are used in the definition of the EQF level descriptors, i.e. knowledge, skills and responsibility and autonomy .*

### Learning units

The credential has been awarded following the completion of the following learning units:

- 1.
- 2.
- ...

The specification of these learning units is given below.

*The list includes the names of learning units (components of the programme) and universities that offer these learning units.*

### Quality assurance of the credential and, where relevant, of the learning content

*The following text (adopted if necessary) can be included here*

The two-level mutual trust-based quality assurance scheme has been adopted:

- at the university level: «issuing university» has applied its internal quality assurance procedures and structures to the proposal of «name of learning opportunity» it submitted to ENHANCE; each university that conducted learning activities associated with «name of learning opportunity» has applied its internal quality assurance procedures and structures to these learning activities,

- at the Alliance level: the body composed of Education Officers has made decisions regarding the inclusion of «name of learning opportunity» proposed by «issuing university» to the Innovative Learning Campus part of the joint ENHANCE educational offer, based on the compliance with the formal requirements and ENHANCE goals.

**Grade achieved** (optional)                      «grade»

*If a grade is given, the grading system of the university that awards the credential is adopted.*

**Integration/stackability options** (optional)

*If the learning opportunity resulting in the awarded credential is an obligatory or elective component of a “larger” programme leading to a “larger” credential, then it has to be specified here. The following text (adopted if necessary) can be used.*

«name of learning opportunity» is a component of «name of the larger programme» coordinated by «university that coordinates the larger programme» leading to «name of the credential issued upon completion of the larger programme».

**Further information** (optional)

*Any further information that would make the document more valuable/informative for the learner and other stakeholders (employers etc.) can be given, e.g.:*

- *partnership with external organisation (e.g. not limited to ENHANCE associated partners) in developing and/or implementing the learning opportunity,*
- *appreciation (employers or employers’ associations recommendation, professional associations acceptance for licensing purposes etc.),*
- *ISCED code, especially for learning opportunity intended for lifelong learners.*

For each learning unit listed in the specification of the credential, the following specification is given.

## LEARNING UNIT 1

<b>Name/Title</b>	«name of learning opportunity, e.g. course <i>Sustainable Innovation</i> , Summer School in Data Literacy»
<b>University</b>	«university» member of the ENHANCE Alliance
<b>Workload</b>	«number of ECTS points, e.g. 5 ECTS or other measure of workload»
<b>EQF Level (optional)</b>	«6, 7 or 8»

### Learning outcomes

*The recommended method of formulating and presenting the learning outcomes for ENHANCE micro-credentials is to classify them, explicitly or implicitly, in three categories that are used in the definition of the EQF level descriptors, i.e. knowledge, skills and responsibility and autonomy .*

<b>Language(s) of instruction</b>	«language»
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### Form of participation in the learning activity

mode of learning	«in-presence, online, blended or hybrid»
duration	«beginning and end of learning activities»
number of contact hours	«number»

*For blended mode of learning, duration and number of contact hours are to be specified for both in-presence and online part.*

### Instructors (optional)

*Names of instructors, preceded by their titles (Dr., Prof. etc.), followed by their affiliations (not necessary, if all instructors affiliated with the university that issues the credential)..*

### Type of assessment

*Various types/methods of learning outcomes assessment can be adopted, depending on the learning outcomes, form(s) of learning activity and forms of participation in the learning activity. Whatever methods of learning outcomes assessment are adopted, they are to be specified.*

*For online assessment, the methods for supervision and identity verification during assessment are to be specified.*

<b>Grade achieved (optional)</b>	«grade»
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### Further information (optional)

*Any further information relevant for the learner and other stakeholders (employers etc.) can be given, e.g. partnership with external organisation (e.g. not limited to ENHANCE associated partners) in developing and/or implementing the learning opportunity.*

## Certificate of Completion for a credit-bearing learning opportunity that does not lead to a micro-credential

*The following graphical elements should occur on this page (page layout to be designed to comply with the new style/layout of ENHANCE documents):*

- *logo of ENHANCE*
- *logo of the issuing university (placeholder)*
- *logo of the supporting institution/organisation, e.g. NAWA (placeholder)*

### CERTIFICATE OF COMPLETION

«issuing university»  
member of the ENHANCE Alliance

certifies that

«first and last name»

born on

«birthdate»

has completed

«name of learning opportunity, e.g.  
course *Innovators of Tomorrow*, etc.»

«name and signature of issuer»

«place and date»

## CERTIFICATE SUPPLEMENT

### Learner

First and last name	«first and last name»
Date of birth	«birthdate»
Place of birth	«place of birth»
BS/MS student of	«university»

<b>Learning opportunity</b>	«name of learning opportunity, e.g. course <i>Innovators of Tomorrow</i> , etc.»
-----------------------------	--

<b>Workload</b>	«number of ECTS points, e.g. 5 ECTS or other measure of workload»
-----------------	---

<b>EQF Level</b> (optional)	«6, 7 or 8»
-----------------------------	-------------

### Learning outcomes

*The recommended method of formulating and presenting the learning outcomes for ENHANCE micro-credentials is to classify them, explicitly or implicitly, in three categories that are used in the definition of the EQF level descriptors, i.e. knowledge, skills and responsibility and autonomy .*

<b>Language(s) of instruction</b>	«language»
-----------------------------------	------------

### Form of participation in the learning activity

mode of learning	«in-presence, online, blended or hybrid»
duration	«beginning and end of learning activities»
number of contact hours	«number»

*For blended mode of learning, duration and number of contact hours are to be specified for both in-presence and online part).*

### Instructors (optional)

*Names of instructors, preceded by their titles (Dr., Prof. etc.), followed by their affiliations (not necessary, if all instructors affiliated with the university that issues the credential)..*

### Type of assessment

*Various types/methods of learning outcomes assessment can be adopted, depending on the learning outcomes, form(s) of learning activity and forms of participation in the learning activity. Whatever methods of learning outcomes assessment are adopted, they are to be specified.*

*For online assessment, the methods for supervision and identity verification during assessment are to be specified.*

**Quality assurance of the credential and, where relevant, of the learning content** (optional, but necessary for stackable credentials)

*The following text (adopted if necessary) can be included here*

The two-level mutual trust-based quality assurance scheme has been adopted:

- at the university level: «issuing university» has applied its internal quality assurance procedures and structures to the proposal of «name of learning opportunity» it submitted to ENHANCE and to its implementation – the related learning activities,
- at the Alliance level: the body composed of Education Officers has made decisions regarding the inclusion of «name of learning opportunity» proposed by «issuing university» to the Innovative Learning Campus part of the joint ENHANCE educational offer, based on the compliance with the formal requirements and ENHANCE goals.

**Grade achieved** (optional)                      «grade»

**Integration/stackability options** (optional)

*If the learning opportunity resulting in the awarded credential is an obligatory or elective component of a (micro-credential) programme leading to a “larger” credential, then it has to be specified here. The following text (adopted if necessary) can be used.*

«name of learning opportunity» is an obligatory/elective component of «name of (micro-credential) programme» coordinated by «university that coordinates the (micro-credential) programme» leading to «name of a credential issued upon completion of the (micro-credential) programme».

**Further information** (optional)

*Any further information that would make the document more valuable/informative for the learner and other stakeholders (employers etc.) can be given, e.g.:*

- *partnership with external organisation (e.g. not limited to ENHANCE associated partners) in developing and/or implementing the learning opportunity,*
- *appreciation (employers or employers’ associations recommendation, professional associations acceptance for licensing purposes etc.),*
- *ISCED code, especuallly for learning opportunity intended for lifelong learners.*

## Certificate of Participation for a non-credit-bearing learning opportunity

The following graphical elements should occur on this page (page layout to be designed to comply with the new style/layout of ENHANCE documents):

- logo of ENHANCE
- logo of the issuing university (placeholder)
- logo of the supporting institution/organisation, e.g. NAWA (placeholder)

### CERTIFICATE OF PARTICIPATION

«issuing university»  
member of the ENHANCE Alliance

certifies that

«first and last name»

born on (optional)

«birthdate»

has participated in

«name of learning opportunity, e.g.  
staff week *Internationalisation at Home*,  
online workshop *AI in Higher Education*, etc.»

taking place

on «date of learning activities»  
or  
from «start date» to «end date»

«name and signature of issuer»  
«place and date»