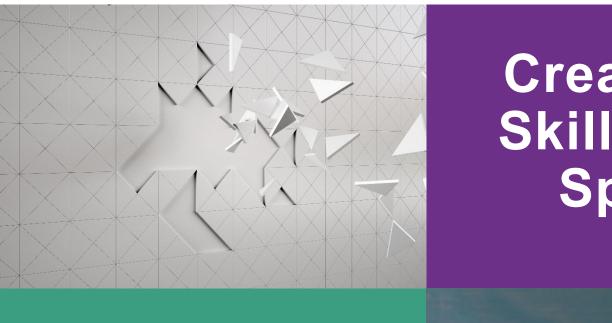


Aims of Digital Credentials for Learning



Creating a Skills Data Space



Market Fragmentation



Removing barriers to recognition

Aims of Digital Credentials for Learning



his Photo by Unknown Author is licensed under CC BY-NC

Multilingual by Default



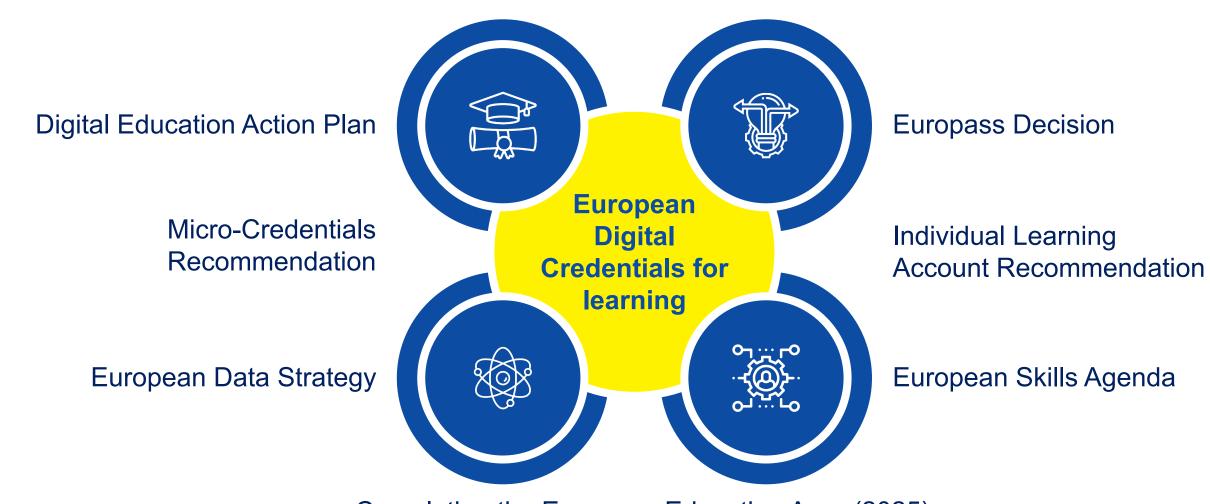




Accreditation & Transparency Tools

CENTRAL TO THE EU'S POLICY AGENDA



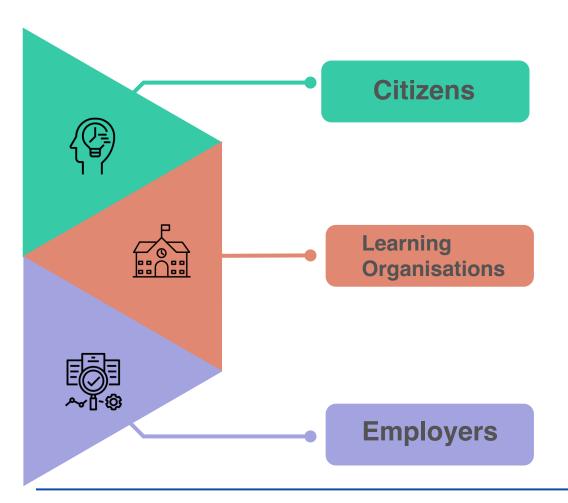


Completing the European Education Area (2025)

Why digital credentials for learning?



Benefits



- can build an online portfolio to track their learning
- can easily utilise their credentials to get a job or apply for further education and training all across Europe
- can present and have their credentials verified at any point in their career
- can build EU standard compliant credentials
- can <u>reduce their costs</u> of issuing credentials after an initial investment into <u>transforming from paper to digital</u>
- can better <u>understand credentials from other Member States</u> as EDC contents can be navigated in 29 languages
- can dramatically reduce the time and cost of processing job applications
- can <u>better understand</u> the credentials of candidates outside of their country
- can immediately see on the instant, automatic <u>authentication and</u>
 <u>verification check</u> list if a credential has expired or was tampered with

Types of digital credentials

- A **credential**, in its most essential form, is a documented statement containing claims made about a person
- qualifications (e.g., professional certificates, university diplomas, VET diplomas, and diploma supplements),
- activities (e.g., participation in classes and non-formal learning events),
- assessments (e.g., transcripts of records), and
- entitlements (e.g., right to enrol in learning opportunities, or to undertake an occupation)



attended the workshop "your career finder" at the European Youth in Strasbourg

Johanna Smith



CERTIFICATE OF ACCOMPLIS





Davide Mezzera

Managing Changes

The certificate of accomplishment is not valid for university credits.

Milan, 15/01/2021 00:00 GMT +0100

Authenticity of this certificate can be verified at https://www.pok.polimi.it/certificates /82974af0058d4e9dbf43a4835bc2fd4c



European

Commission

Certificate of Participation



Alkistis Athanasopoulou



participated in the Basic Training for Trainer

LGRTOL Community and Youth

participated in the Basic Training for Trainer

that took place from

11/03/2021 00:00 GMT +0100 to 01/04/2021 00:00 GMT +0200

Frasmus Student Network

In conneration with more than 500 local associations from 42 European countries youth-led Erasmus Student Network (ESN) possesses unique knowledge of the needs and rights of current and future international students. ESN believes that education is crucial in forming conscious and active citizens of the world. Therefore, through various on-formal education training programmes, ESN thrives to provide more inclusive education and opportunities for youth and empower youth workers across Europe

Eduk8 is ESN's training programme aiming to create an international pool of trainers workshops, as well as training events in order to further educate and develop students and youth on various topics by using non-formal education methods

President of Erasmus Student Network





What is a European Digital Credential for Learning?



A **digital credential** covers two areas:

- **Content** = learning outcomes, skills, description of the activities
- **Envelope** = area of identity, authentication, secure delivery policies

A European Digital Credential for Learning is a claim related to the learning achievement of a person. It creates the link between an individual, an awarding body, and a learning achievement.

A European Digital Credential for Learning consists consists of data that is structured in accordance with a data model (the European Learning Model).

European Digital Credentials for Learning are tamper-proof and secure (they respect data privacy). They comply with the international standards of "verifiable credentials". They are **GDPR compliant**.



European Digital Credentials for Learning require an e-seal (= digital signature with legal value in line with the EU e-IDAS regulation).

European Digital Credentials for Learning



Functions



Issue

credentials and send them to their owners



Store

credentials securely in a single online or offline wallet



Verify

if the credential is authentic, valid and issued by an accredited organisation



Share

the information in the credential with any other person or organisation with just a click

E-Seals





An eSeal guarantees the origin and integrity of a document.



This can be done by the awarding body or by a sealing organisation.

Foreseen technical developments



Q1-Q4/2022

- Code becomes open source
- Diploma Supplement
- **Accreditation Database**
- ELM v. 3.0
- JSON support (native verifiable credentials)
- **Enhanced Documentation**
- Multilingual Platform and credentials

2023 & beyond

- **Archive Wallet**
- Revocation list
- Re-signing service
- **Europass Mobility**
- Digital recognition statements
- Data Model Browser



What is a data model?



A data model is an abstract data scheme that:

- organises elements of data and
- standardises how they relate to one another and to the properties of real-world entities

Europass Credential < extends VerifiableCredential >

Class description: A set of claims made by an issuer in Europe, using the Europass Standards. A Europass credential is a set of one or more claims which may be used to demonstrate that the owner has certain skills or has achieved certain learning outcomes through formal, nonformal or informal learning.

| Label | Definition | Field | Type Range (data type) | Card | Suggested Use | Recommended Controlled Vocabulary |
|--------------------------|---|-------------|---------------------------|------|------------------|--|
| Credential Identifier | An alternative identifier of the credential typically assigned to the credential by the issuing organisation. | identifier | Property Identifier | * | | |
| Туре | The type of credential. | type | Property Code | 1 | | Europass Standard List of Credential Types |
| Title | The full official title of the issued credential (maximum 50 characters). | title | Property Text | 1 | | |
| Description | A summary of the claim or group of claims being made about a person (maximum 140 words). | description | Property Note | 01 | | |
| Driman | The primary language of | | | | | bg, cs, da, de, el, en, es, et, fi, fr, ga, hr, hu, |

The Development of the European Learning Model



One of the key sources of ELM is the EQF Recommendation :

- Annex VI: "Elements of data fields for the electronic publication of information on qualifications with an EQF level"
- Recital 24: "...The use of common data structures and formats would facilitate the understanding and use of published information on qualifications"

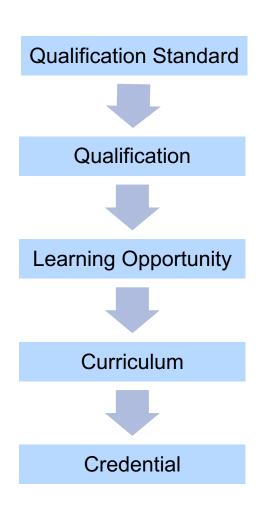
ANNEX VI Elements for data fields for the electronic publication of information on qualifications with an EQF level

| DATA | | | Required/Optional | | |
|---------------------------------------|--------|--|-------------------|--|--|
| Title of the qualification | | | | | |
| Field (*1) | | | Required | | |
| Country/Region (code) | | | Required | | |
| EQF Level | | | Required | | |
| Description of the qualification (*3) | Either | Knowledge | Required | | |
| | | Skills | Required | | |
| | | Responsibility and autonomy | Required | | |
| | Or | Open text field describing what the learner is expected to know, understand and able to do | Required | | |

The European Learning Model

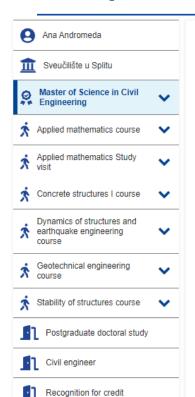


- A single data model which can be used at all stages of a learning lifecycle
- Can be applied to any educational/learning process, whether formal, non-formal or informal
- Includes information on accreditation (where relevant)
- ELM is used on the Europass platform & in other EC services (eg European Blockchain Service Infrastructure)
- ELM has the potential for a much wider use (in Europe : Erasmus+ mobility, Single Digital Gateway)



European Learning Model





Master of Science in Civil Engineering

Awarding Date: 20/09/2019 00:00 GMT +0200

Awarding Body: Fakultet Gradevinarstva, Architekture i Geodezije

This is the overall description of the achievement of the Master of Science in Civil Engineering, that is linked to the overall credential, together with its sub-achievements.

Proven by

| Title | Grade | | |
|--------------------|---------------|--|--|
| Overall Assessment | excellent (5) | | |

Influenced by: Applied mathematics course, Applied mathematics Study visit, Concrete structures I course, Dynamics of structures and earthquake engineering course, Geotechnical engineering course, Stability of structures course

Entitles Owner to: Postgraduate doctoral study, Civil engineer, Recognition for credit

Sub-Achievements

Applied mathematics, Concrete structures I, Dynamics of structures and earthquake engineering, Geotechnical engineering, Stability of structures

Specification %

Ach-Spec-ID-Scheme identifier: AchSpecID-72

Learning Outcomes:

LO1 related to applied mathematics 🔥

LOID-Scheme identifier: LOID-73a

To formulate equations of mathematical physics for engineering problems, and to solve them analytically or with numerical methods.

Type: knowledge

Reusability Level: cross-sector skills and competences

Related ESCO Skills: use mathematical tools and equipment, execute analytical mathematical calculations, geodesy

Related Skills: applied mathematics, perform engineering calculations, construct earthquake resistant structures

Includes **250 properties** to describe

- Organisations
- Details of the **credential owner**
- Achievements (including grades and references to EQF/NQF levels, ISCED-f codes, and learning outcomes referencing ESCO of other external skill/competence frameworks)
- Activities (by start and end dates; format, mode and volume of learning)
- Entitlements (Entitlement to work as an attorney or enroll in further education)

Areas of adoption

- **Digital qualifications** (in HE and VET) issued (or in preparation) by several countries using the EDC infrastructure
- Credential **recognition** DigiNet, SEA-EU, ECCOE projects
- Malta issuing 2000+ transcripts of records in early 2022
- ESN, European Commission, SEPIE issue non-formal training certificates
- European Consortium of Innovative Universities (ECIU) building own solution
- Vendors (e.g. Moodle, Hyland, Digitary) developing own interoperable credentialing products



EDC webpages



Thank you!

Contact us at

EMPL-ELM-Support@ec.europa.eu