

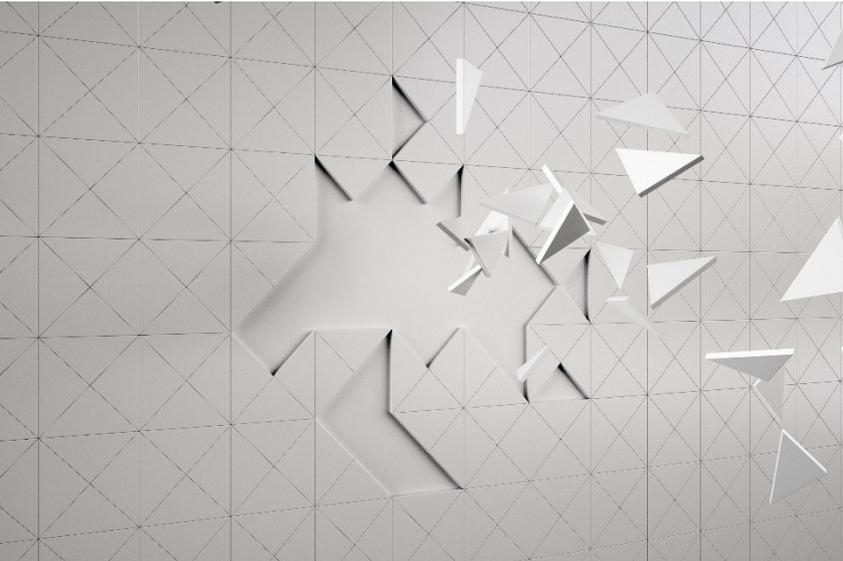
European Digital Credentials for Learning

Session 11

6 September 2022



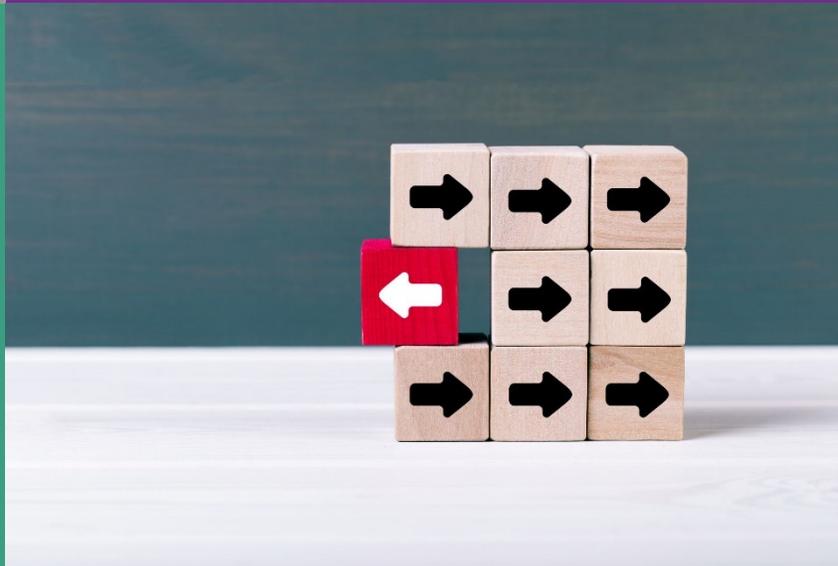
Aims of Digital Credentials for Learning



**Creating a
Skills Data
Space**



**Market
Fragmentation**



**Removing
barriers to
recognition**

Aims of Digital Credentials for Learning



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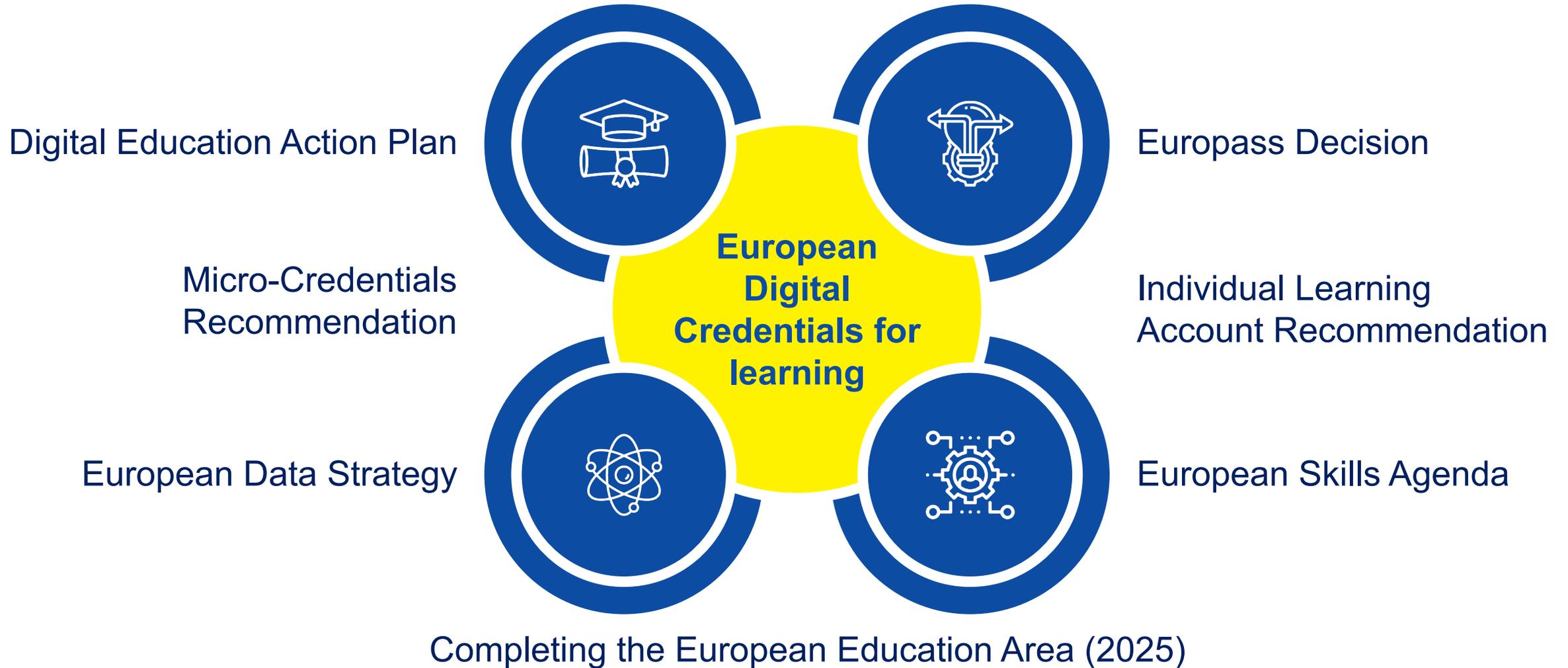
Multilingual by Default

User Ownership



Accreditation & Transparency Tools





Benefits



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)



A **digital credential** covers two areas:

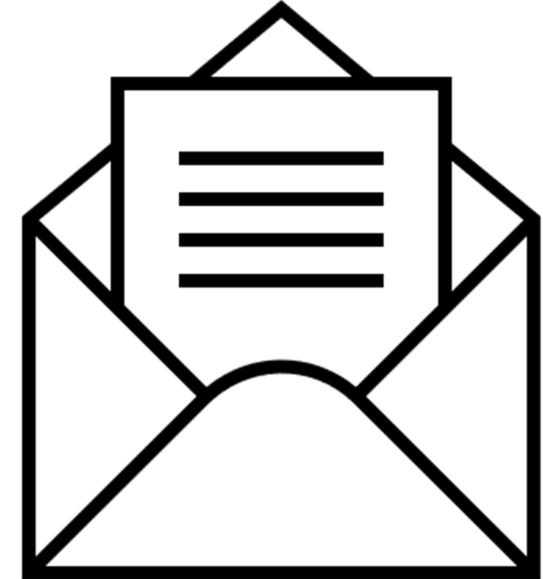
- **Content** = learning outcomes, skills, description of the activities
- **Envelope** = area of identity, authentication, secure delivery policies

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).



Functions





An eSeal guarantees the origin and integrity of a document.



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

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

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, non-formal 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	*		
Type	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	0..1		
Language	The primary language of					bg, cs, da, de, el, en, es, et, fi, fr, ga, hr, hu,

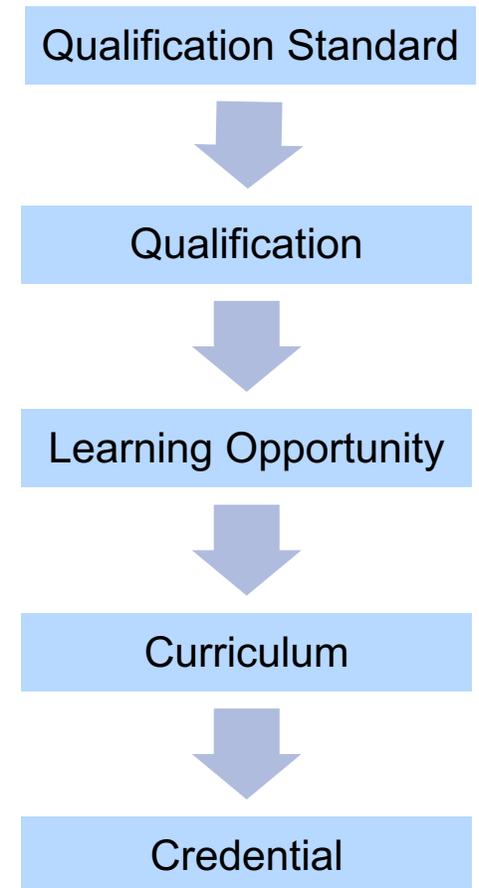
One of the key sources of ELM is the EQF Recommendation :

- 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		Required	
Field ⁽¹⁾		Required	
Country/Region (code)		Required	
EQF Level		Required	
Description of the qualification ⁽²⁾	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

- 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)



- Ana Andromeda
- Sveučilište u Splitu
- Master of Science in Civil Engineering** ▾
- 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 ▾
- Postgraduate doctoral study
- Civil engineer
- Recognition for credit

Master of Science in Civil Engineering

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

Awarding Body: Fakultet Građevinarstva, Arhitekture 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)

- **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

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