

The European Learning Model

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, 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	*		
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		
Drimon	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"

The Council Recommendation on a European approach to micro-credentials for lifelong learning and employability:

- Recommendation 6: "Member States are recommended to adopt and promote the use of the European standard elements to describe a microcredential (as described in Annex I)
- Annex I: "European standard elements to describe a micro-credential"

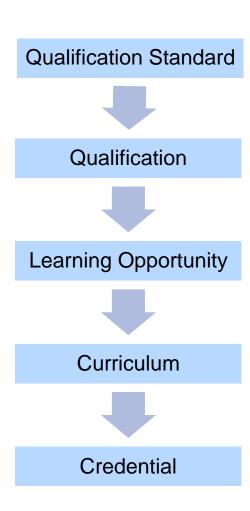
ANNEX VI Elements for data fields for the electronic publication of information on qualifications with an EQF level

DATA			Required/Optional	
Title of the qualification				
Field (*1)				
Country/Region (code)				
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 (Erasmus+ mobility, Single Digital Gateway)



European Learning Model

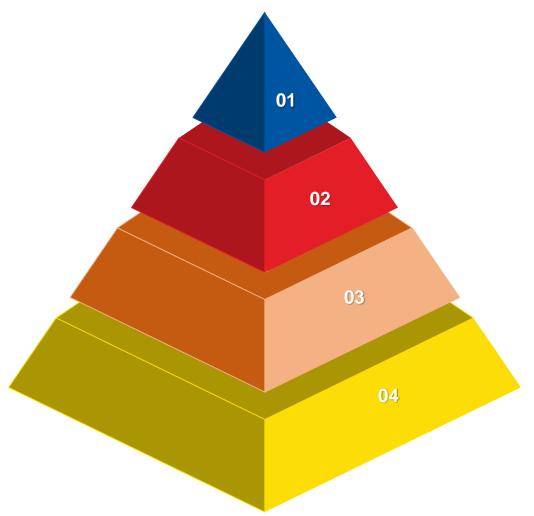


01 European Information Model

Definitions and Standards in EQF Recommendation, Diploma Supplement, Europass Decision, etc. supplemented by glossaries for additional terms

03 Application Profiles

Specific sets of rules for publishing learning opportunities, qualifications, accreditations and credentials in Europass



02 European Learning Model

A Linked Open Data publication of concepts to be used in educational and employment use cases throughout Europe

04 Extensions

National, Regional or Sectoral extensions of the data model & application profiles to deal with specific use cases

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 400 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)

The history and evolution of the data models



Legacy Data Model

- EQF model
- Ploteus Model
- LOQ Portal
- Republication of the data into a single EU Portal

Qualifications Metadata Schema -ELM v.1

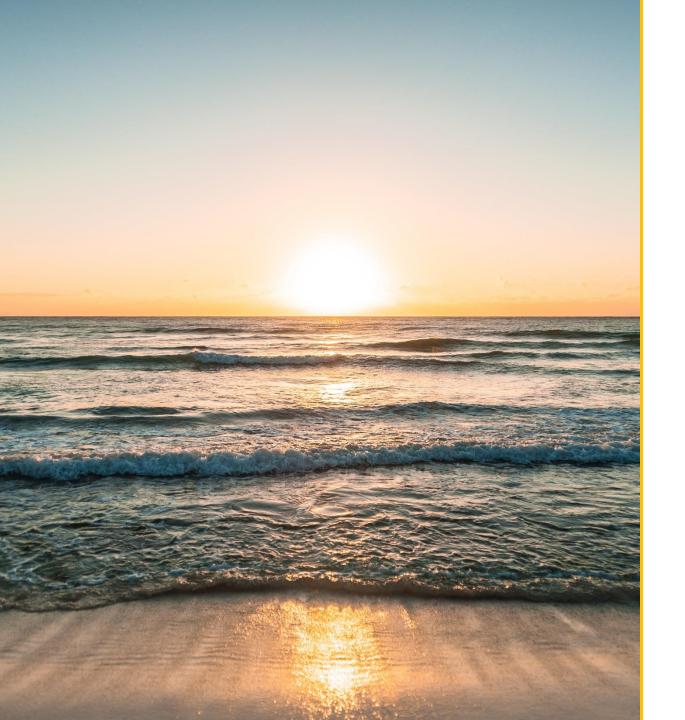
- QMS1
- Adding open interoperability standards

Europass Data Models -ELM v.2

- QMS2, LOMS, AMS
- Extending to all Europass learning use cases

European Learning Model - ELM **v.3**

- ELM, Application **Profiles**
- Integrating the individual models



Phasing out Strategy

- ELM v.3 will be supported exclusively as of April 2023
- Data provided in EQF/QMS1/Ploteus will no longer be visible on Europass
- Support will be provided exclusively for ELM v.3
- Data provided in QMS2 and LOMS will automatically be converted





Thank you!

Contact us at

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