European Digital Credentials for Learning

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Europass Components & Interoperability

**Europass infosite**
 Presents information as described on the Europass decision and the first access point to register and use the digital tools.

**e-Portfolio**
 Set of online tools & information to manage every step of your learning and career.

**Jobs, Courses, and Qualifications Search**
 Central database to search for courses, qualifications, accreditation throughout Europe and link with EURES.

**Digital skills Test**

**Digital Credentials**
 Set of standards, services & software allowing institutions to issue digital, tamper-proof qualifications and other learning credentials.
Central to the EU Policy Agenda

- Digital Education Action Plan
- Micro-Credentials Recommendation
- European Data Strategy
- Europass Decision
- Individual Learning Account Recommendation
- European Skills Agenda
- Completing the European Education Area (2025)

European Digital Credentials for learning
# Why an EU role in Digital Credentialing?

## OBJECTIVES
- Empower citizens to own their credentials
- Semantic standards for Dig Cred
- Create an EU Skills Data Space
- Make digital credentials multilingual by default
- Remove barriers to recognition
- Provide accreditation & transparency tools

## BENEFITS
- Captures formal, non-formal & informal learning
- Addresses all levels of E&T
- Applicable to the whole course lifecycle
- Interoperable credentials
- Aligned with European recognition instruments
- Free & open source
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 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”.

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

This infrastructure encompasses the technical specifications to implement the framework. It comprises the following core building blocks to help operationalise the framework:

- **Standards**
- **Services**
- **Software**
Diploma Supplement and Instant and Automatic Checks, including Accreditation

Graduate University Study of Civil Engineering

Valid from: 20/02/2019 00:00 GMT +0200

Types: Diploma Supplement (Mandated Issue)

University of Split is Accredited by the Croatian Agency for Quality Assurance.
Digital Credentials and ESCO

- European Skills, Competences, Qualifications and Occupations (ESCO)

- describing, identifying and classifying professional occupations and skills relevant for the EU labour market and education and training area

- systematically showing the relations between those occupations and skills

- ELM allows allows the cross-references
Thank you!

Contact us at
EMPL-ELM-Support@ec.europa.eu
Introduction to ESCO
The European Classification of Skills, Competences and Occupations

ESCO works as a dictionary, describing, identifying and classifying professional occupations, skills, and qualifications relevant for the EU labour market and education and training.
ESCO v1.1.1

Green transition
Identification of a *taxonomy of skills for the green economy*

Digital transition
109 new concepts related to digital technologies

Emerging technologies
Focus on *occupations and skills for researchers*

Increasing importance of transversal skills
New model for *transversal skills and competences*

Artificial intelligence
Application of artificial intelligence to improve efficiency of the continuous improvement process
Occupation profiles

- **Occupation hierarchy**
  - Built on ISCO 08
  - Can have further specialisations

- **Description, alternative labels, regulatory aspect**

- **Essential and optional skills and knowledge**
  - A set of skills for each occupation

- **Machine readable**
  - One URI
  - Based on SKOS

- **Translated in 28 languages**
Skill & knowledge profiles

- Multiple hierarchies
  - Skill hierarchy
  - Transversal skill hierarchy
  - Knowledge hierarchy
  - Language hierarchy
- Description, alternative labels, reusability level
- Essential and optional occupations
  - A set of occupations for each skill
- Labels: **green, DigComp, research**
  - Working on a digital label
- Machine readable
  - One URI
  - Based on SKOS
- Translated in 28 languages
ESCO in digital applications: use cases

- Job-matching and searching
- Graduate tracking
- Career learning & development management
- Statistical research
- Curricula development
- Ontology management & machine learning
- Validation of informal/non-formal/formal learning
Mission of Data Science for ESCO

Use an analytical approach based on statistical analysis, data science and machine learning to assist in:

- Making **maintenance** of ESCO more efficient
- Expanding ESCO
- Making ESCO **easier to use** by implementers
THANK YOU