

European Digital Credentials for Learning

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Europass infosite

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

e-Portfolio

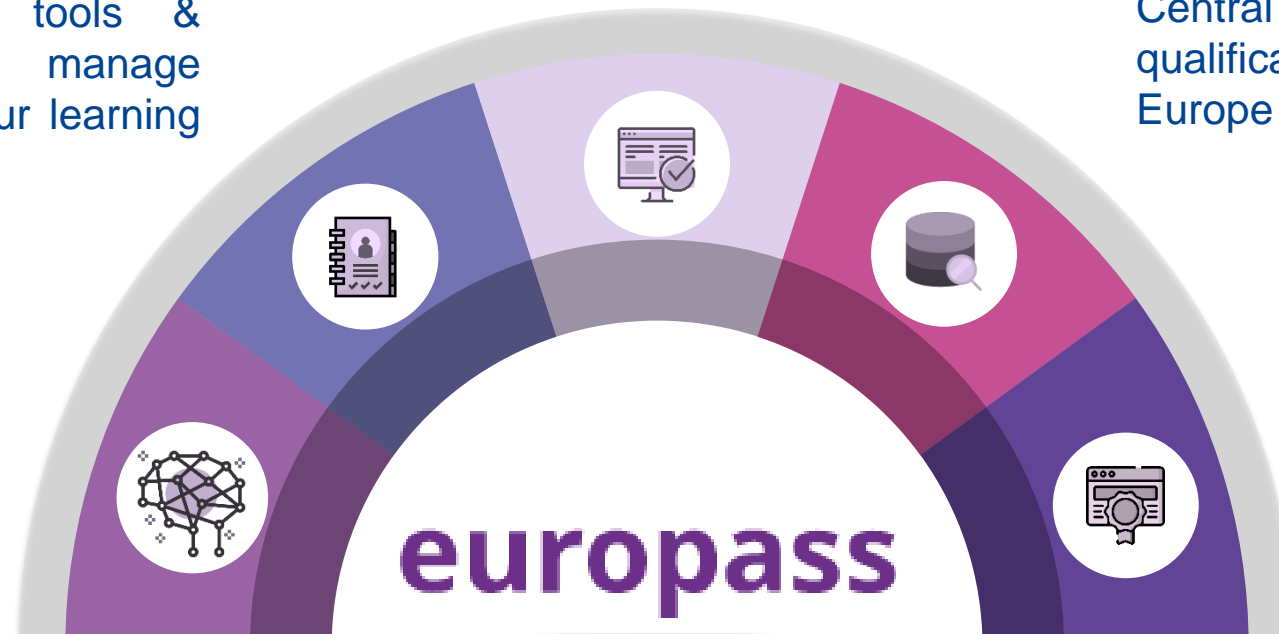
Set of online tools & information to manage every step of your learning and career.

Jobs, Courses, and Qualifications Search

Central database to search for courses, qualifications, accreditation throughout Europe and link with EURES

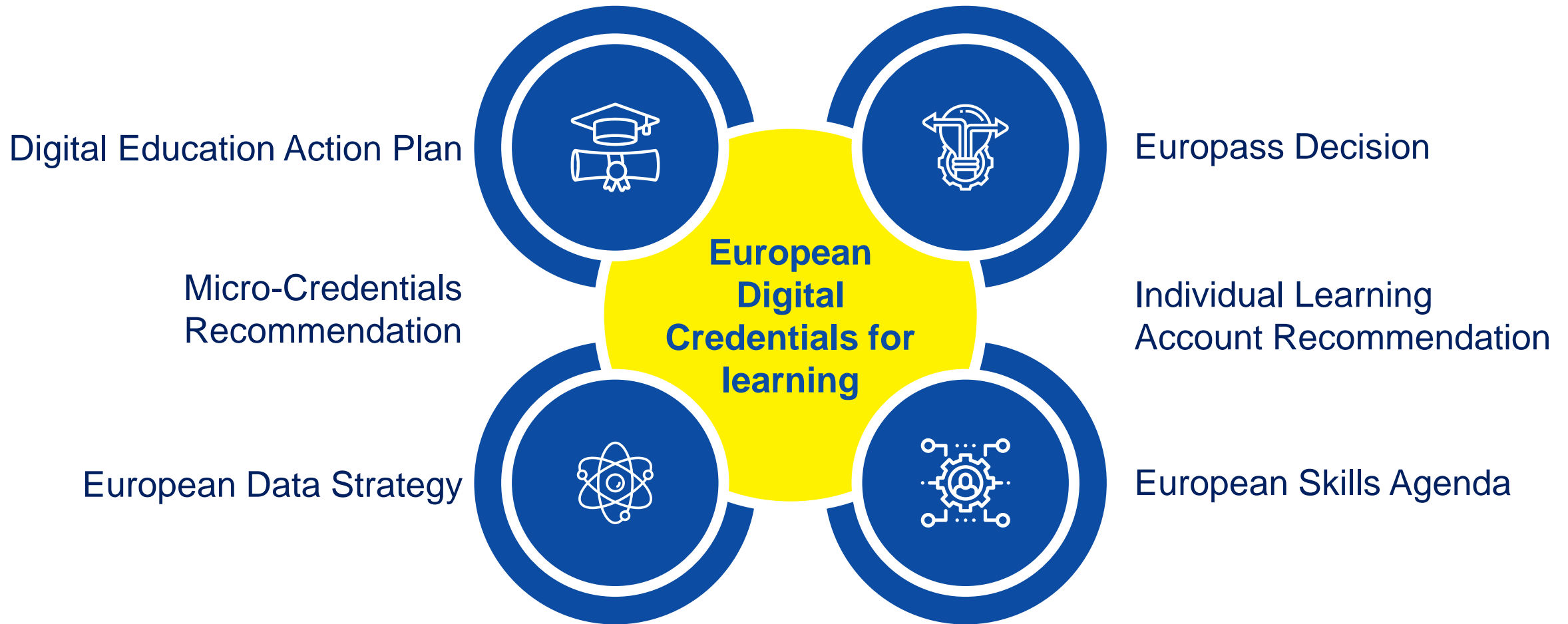
Digital skills Test

Open-source tool to assess and improve digital skills. Based on the Digital Competence Framework.



Digital Credentials

Set of standards, services & software allowing institutions to issue digital, tamper-proof qualifications and other learning credentials.



Completing the European Education Area (2025)

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 consists of **data** that is structured in accordance with a data model (the European Learning Model).

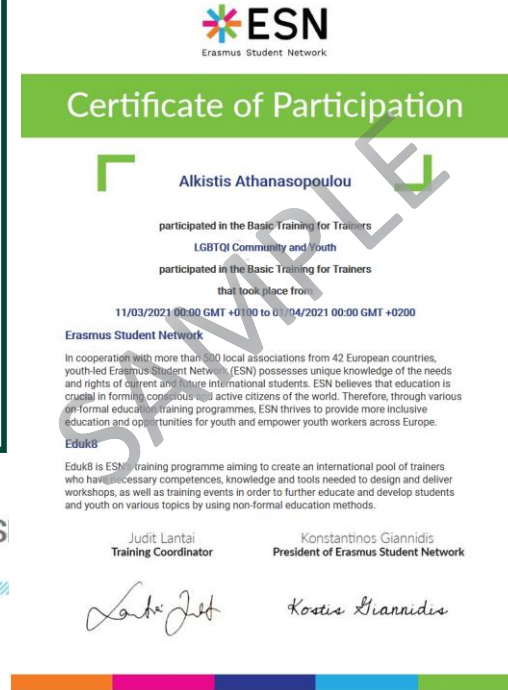
European Digital Credentials for Learning are **tamper-proof** and secure (they respect data privacy). They comply with the **international standards** of “verifiable credentials”.

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)



Functions



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

including Accreditation

Graduate University Study of Civil Engineering

Valid from: 20/09/2019 00:00 GMT +0200 | Type: Diploma Supplement (Mandated Issue)



[Home](#) | [Export](#) | [Upload another credential](#) | [Share](#) | English

- Ana Andromeda
- Sveučilište u Splitu
- Master of Science in Civil Engineering
- Applied mathematics course
- Applied mathematics Study visit
- Postgraduate doctoral study
- Surveyors Board Member
- Civil engineer

Sveučilište u Splitu
EUROPASS DIPLOMA SUPPLEMENT

This Diploma Supplement model was developed by the European Commission, Council of Europe and Unesco/CEPES. The purpose of the supplement is to provide sufficient independent data to ensure the international transparency and fair academic and professional recognition of qualifications (degrees, diplomas, certificates, etc.).

1. HOLDER OF THE QUALIFICATION

1.1 Family name (surname)	1.2 First name (given name)
1.3 Date of birth (DD/MM/YYYY)	1.4 Issuing ID number or code (for EU citizens only)

2. ISSUING ORGANISATION

2.1 Name of institution (Sveučilište u Splitu)	2.2 Country (Croatia)
2.3 Address (Pločevo ulica 8, 21000 Split, Croatia)	

Authentication and Verification Check

- FORMAT**
This credential is technically valid.
- SEAL**
- REVOCAATION**
Verification step skipped
- ACCREDITATION**
University of Split is Accredited by the Croatian Agency for Quality Assurance.
- VALIDITY**
The credential is still valid.
- VERIFIED**

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Graduate University Study of Civil Engineering

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Credential Preview | Export | Upload another credential | Share | English

Ana Andromeda

University Great

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

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

- 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.



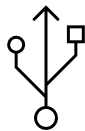
ESCO v1.1.1

Green transition



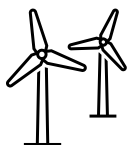
Identification of a **taxonomy of skills for the green economy**

Digital transition



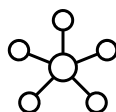
109 new concepts related to digital technologies

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**

palaeontologist Discuss in the forum Download

Professionals >
Science and engineering professionals > Physical and earth science professionals >
Geologists and geophysicists > geologist > palaeontologist >

Description

Code
2114.19

Description
Palaeontologists research and analyse forms of life that existed in ancient eras of the planet Earth. They strive to define the evolutionary path and the interaction with different geological areas of all kinds of once organisms and such plants, pollen and spores, invertebrate and vertebrate animals, humans, traces such as footprints, and ecology and climate.

Alternative Labels

palaeontology analyst palaeontology research analyst palaeontology scholar

palaeoecologist paleontologist ichnologist palaeontology researcher

palaeontology scientist palaeontology science researcher

palaeontology research scientist micropalaeontologist

Regulatory Aspect
To see if and how this occupation is regulated in EU Member States, EEA countries or Switzerland please consult the Regulated Professions Database of the Commission. Regulated Professions Database:
http://ec.europa.eu/growth/single-market/services/free-movement-professionals/qualifications-recognition_en

Skills & Competences

Essential Skills and Competences

promote the transfer of knowledge speak different languages

manage findable accessible interoperable and reusable data

manage intellectual property rights perform project management

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**

apply for research funding

communication, collaboration and creativity
negotiating > negotiating and managing contracts and agreements > find grants > skills >
information skills > documenting and recording information >
preparing documentation for contracts, applications, or permits > apply for research funding >

Description

Description

Identify key relevant funding sources and prepare research grant application in order to obtain funds and grants. Write research proposals.

Alternative Labels

generate research funding identify research grants apply for research grants

draft research grants applications

Skill type

skill

Skill reusability level

cross-sector skills and competences

Relationships

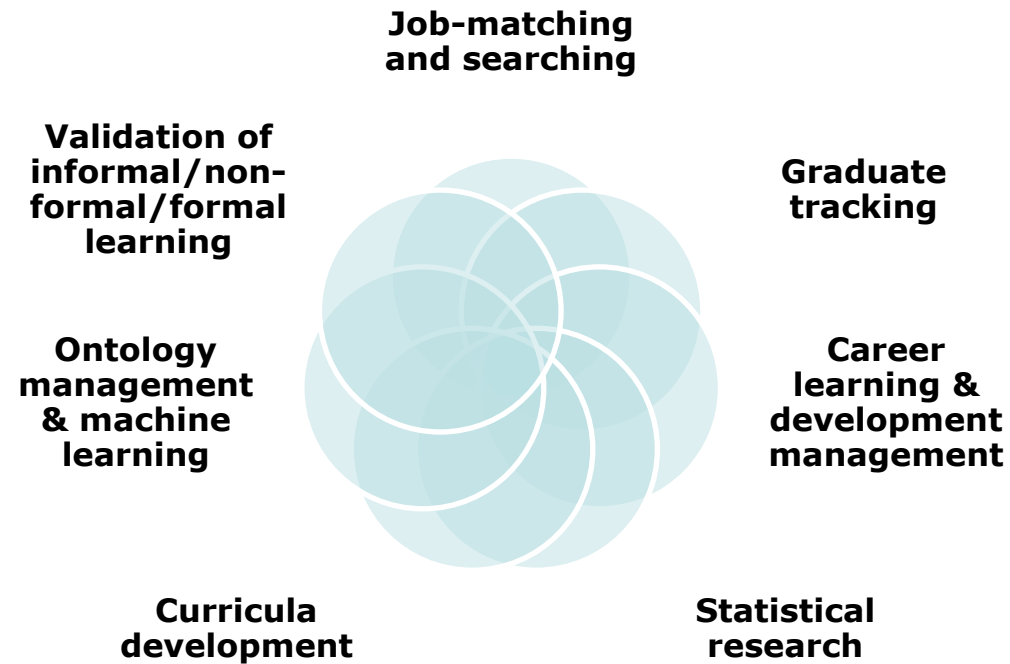
Broader concepts

preparing documentation for contracts, applications, or permits find grants

Essential for

chemist religion scientific researcher agricultural scientist pharmacologist
climatologist environmental scientist university research assistant geneticist

ESCO in digital applications: use cases



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

