



European Training Foundation

EUROPEAN TRAINING FOUNDATION

European Learning Model, Digital Credentials and the link
with the ESCO

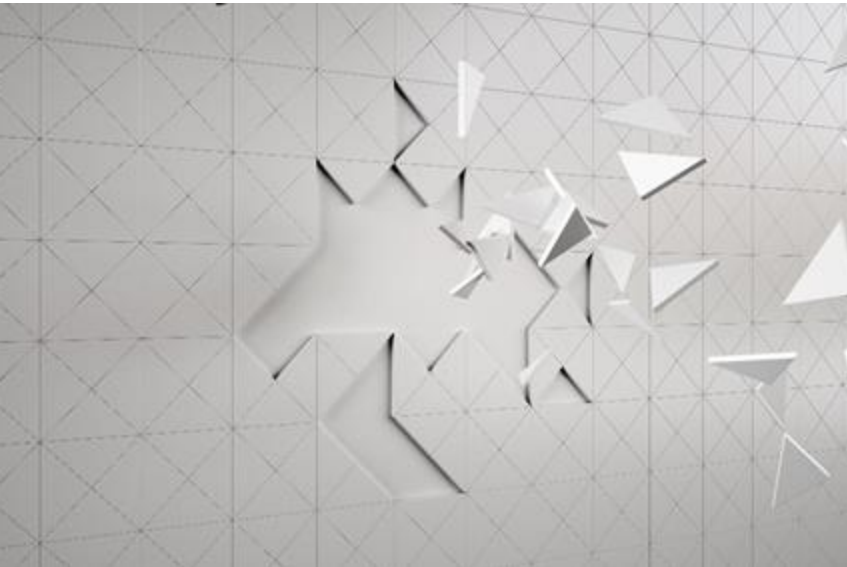


14^o February 2023

The European Learning Model

and related services

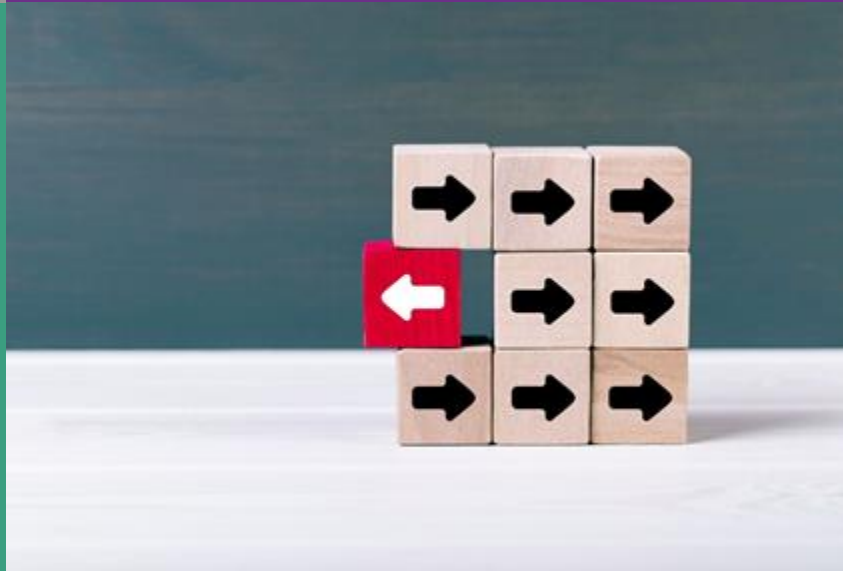
The European Learning Model is intended to



**Power Skills
Intelligence**

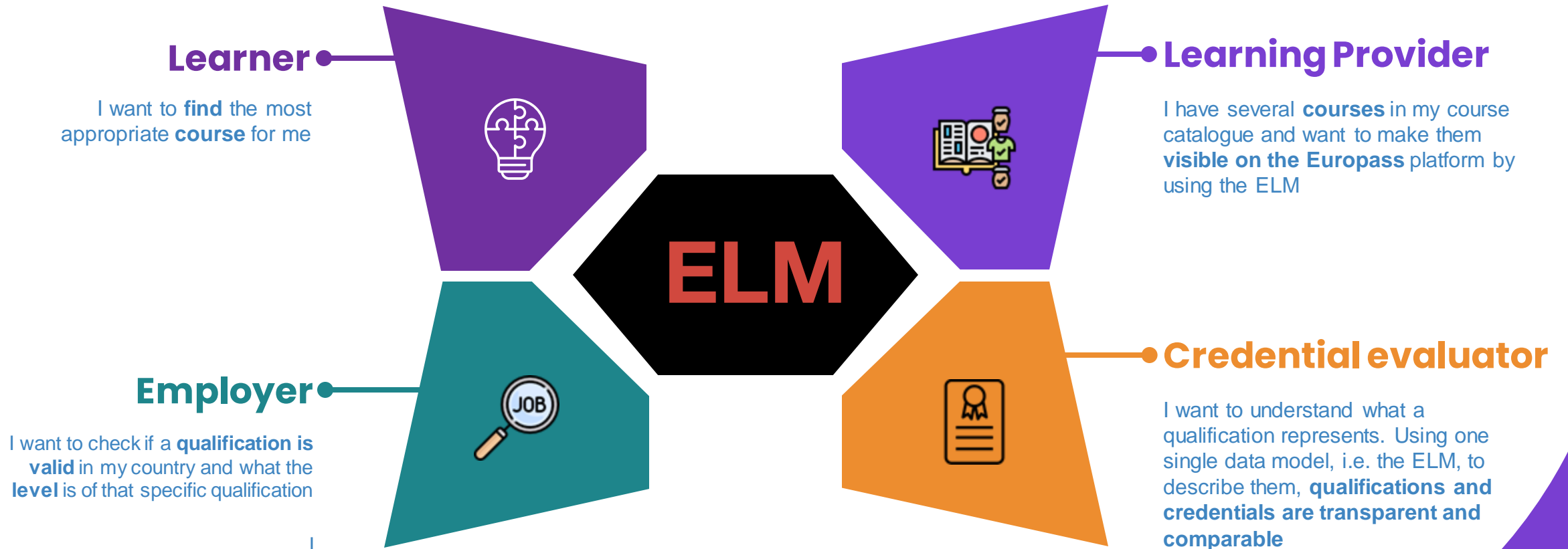


**Reduce Market
Fragmentation**



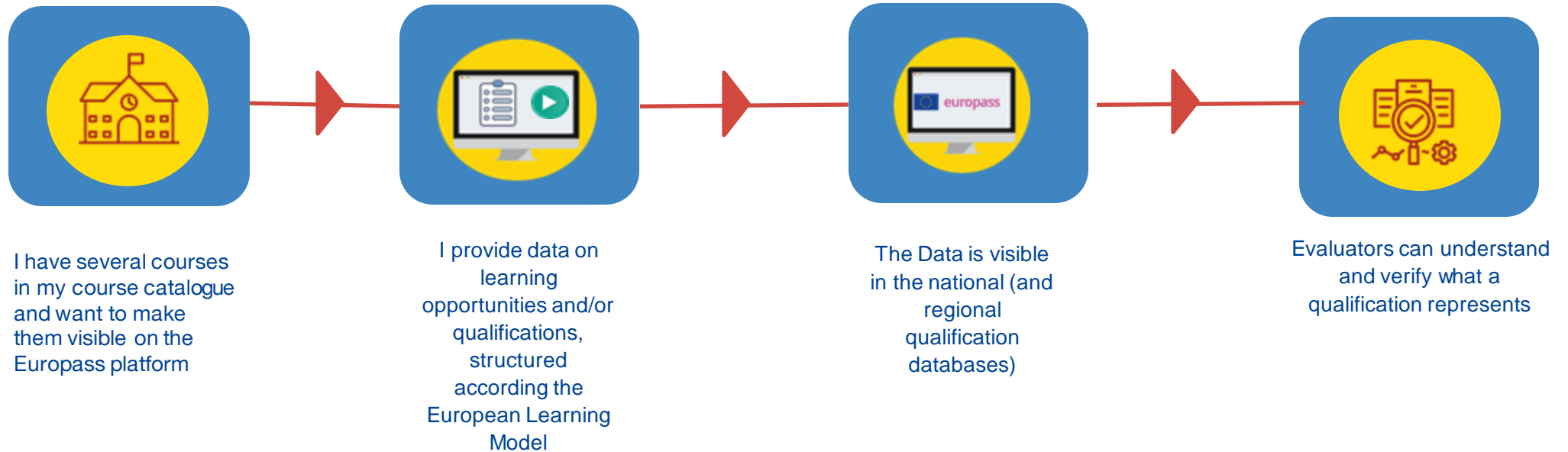
**Remove
barriers to
recognition**

Beneficiaries of the European Learning Model



The use of the ELM by Implementers

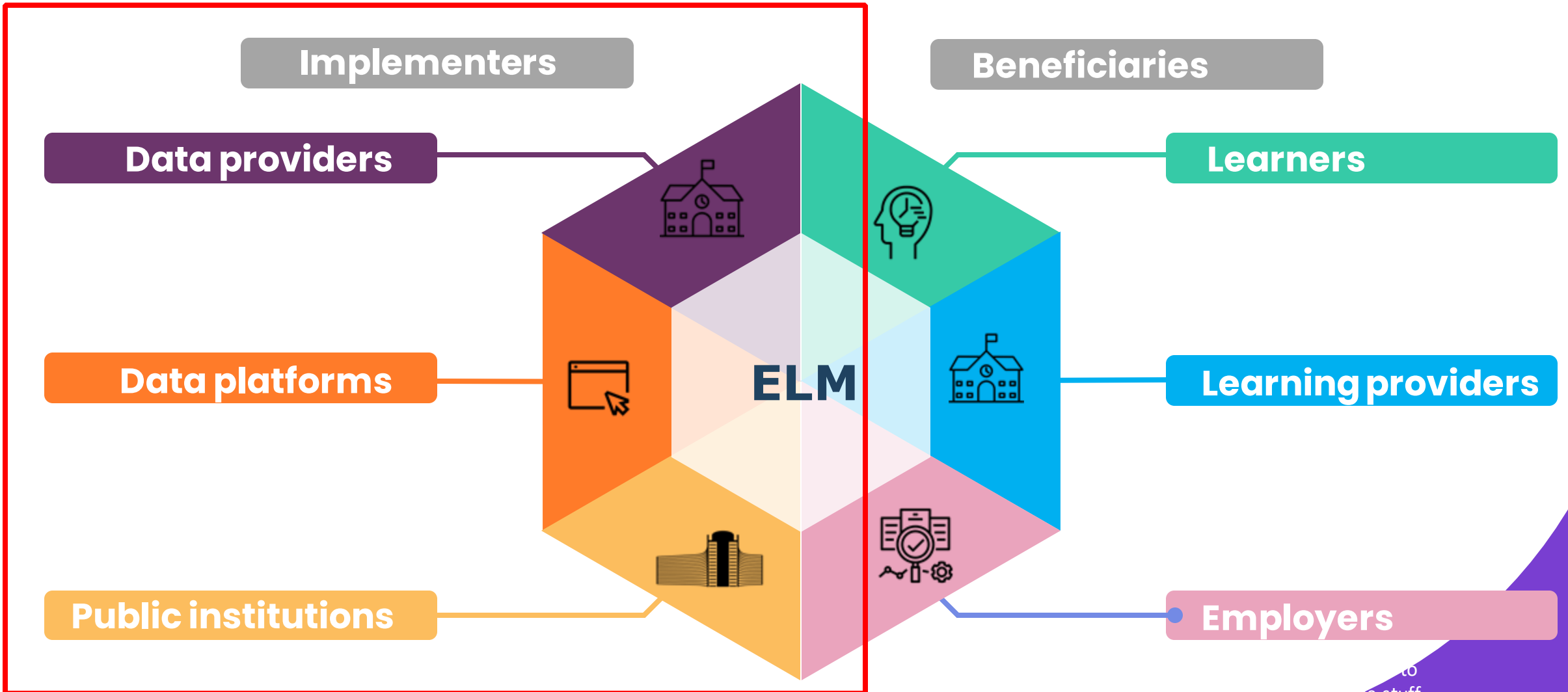
Data provider



Benefits ELM 3.0 (I)

- One stable model addressing all levels and forms of learning
- Data providers can use ELM within national context, but they are not obliged
- Built on open standards and linked open data
- Native in all 29 Europass languages including **French**
- Uses familiar frameworks, classifications and taxonomies (e.g. EQF, NQF, ESCO and ISCED-f)
- Allowing for rich data – 400+ property fields (without restriction – only a few properties are compulsory)
- Supports data exchange and credential recognition
- Long-term support version of the data model

Users of the ELM



to
age stuff
we start a project

Design Brief
for an
Effective Learning
Standard





Addresses all Levels of Education



**Aligned with European Recognition
Instruments**

**Captures
Formal, Non-
Formal &
Informal**





**Applicable to the
whole course lifecycle**



Interoperable



Free & Open Source



A new Meta-Model for Interoperability



europass

“

The Europass Learning Model is the connective tissue for skills and qualifications data in Europe

”

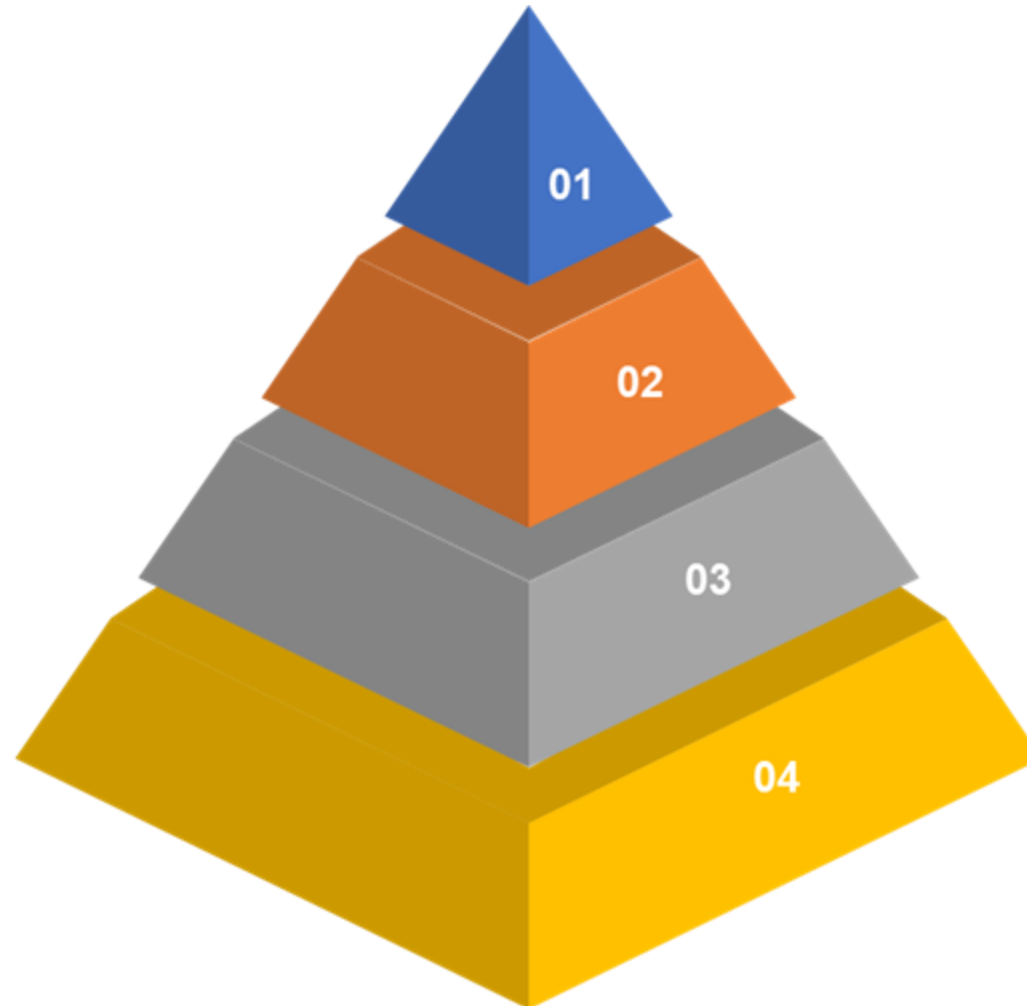
European Learning Model

European Information Model

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

Application Profiles

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



European Data Model

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

Extensions

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

Learning outcomes in the ELM: important to know

The user will be able to

VERB, at **LEVEL OF ACHIEVEMENT**, in a **CONTEXT**

Linked to a skills
taxonomy

Linked to a
competence
framework

Linked to an
occupational
framework



ESCO, national and/or sectoral frameworks and Learning outcomes

- What is the link with ESCO and with national and/or sectoral frameworks?
- Referencing to ESCO is supported by the data model
- Other referencing can be mapped to ELM (e.g. DigComp, ROME)

Learning outcomes in the ELM: important to know

The user will be able to

Speak English, at proficiency level B2, as an engineer.

Linked to a skills
taxonomy

ESCO skill

Linked to a
competence
framework

**Common European
Reference Framework
For Languages**

Linked to an
occupational
framework

**ESCO occupation/
category**

LEARNING OUTCOMES – MAIN ISSUES

- Duplication of text across different data fields
- Lengthy learning outcomes (750 words)
- Generic learning outcomes
- Learning outcomes not tagged with frameworks (ESCO/DigCOmp)

Learning Outcomes in Qualifications data in Europass



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Master of Research in Aerospace

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Key Information

Location
Malta

Duration
12 months

EQF Level
7

Teaching language
English, Maltese

Delivery method
Part-time

[Consult the qualification](#)



Provided by



University of Malta
Mars 140 2100, Malta
info@um.edu.mt

As an entrepreneurial school, the MCI combines science, business and consulting into a unique concept. Innovative degree programs at Bachelor and Master level in the fields of business & society and technology & life sciences as well as the postgraduates.

About this course

The aviation industry is global, competitive and driven by rapidly changing market and technological forces. The qualification of this program is focused on equipping you with the skills to achieve results in this dynamic industry. The Aerospace Engineering MSc degree is a specialist, accredited course that has been developed to equip you with advanced technical knowledge and management skills to meet the needs and current challenges facing the ever-growing aerospace engineering industry. It involves the design, production, operation, and support of aircraft and spacecraft.

The courses include:

- Aircraft & Air Transportation
- Human Factors in Aviation Safety
- Airline Operations Management
- Aviation Strategy and Resource Management
- Incident and Accident Investigation

How to apply

Tuition fee

The tuition fees depend on the course you're studying

Dates

Start: 12/01/2021

End: 31/01/2021

Admission procedure

[University of Malta](#)

Entry requirements

Applicants must possess a bachelor's degree in **Aeronautical Engineering / Aerospace Engineering / Mechanical Engineering / Manufacturing Engineering / Engineering Management / Materials Science and Engineering / Electrical and Electronic Engineering / Civil Engineering / Environmental Engineering**, or a related field with second class honors or above, or an equivalent qualification from a recognized university or tertiary institution.

Learning schedule

Days: Tuesdays and Thursdays

Time: 9:00 to 13:00

Grading scheme

You must have finished all your courses as stated in your approved IEP before you can present and defend your thesis.

- Incident and Accident Investigation

Credit points

30 Microsoft credits

Who is this course for?

A specific target group or category for which this specification is designed.

ECTS points

7.5

Workload

150h of classwork, 150h of self-study and 50h of groupwork

How you will learn

Presental

For updated info, visit the course homepage via the apply to this course button.

What you will learn

On successful completion of the program, graduates will be able to:

- Select and apply appropriate advanced mathematical and numerical methods to effectively address real world aeronautical engineering problems.
- Analyze and design complex mechanics, material/structure and/or control systems.
- Analyze existing aeronautical engineering problems in depth.
- Design and operate complex systems from a conceptual design perspective.
- Carry out logistic management and quality control strategies for aviation related projects.

[Related ESCO skills](#)

[Related digital skills](#)

Career opportunities

After graduating with an Aerospace Engineering MSc you will be in a strong position to seek employment with companies such as: Airbus, Rolls Royce, GE Aviation, Airbus, Bombardier Transportation, BAE Systems, MBDA, SAFRAN, GKN Aerospace, Spirit, Finmeccanica, EDF, BP, Schlumberger, etc.

Learning Outcomes in European Digital Credentials for Learning



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

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

Entities 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

LO2 related to applied mathematics

LO related to concrete structures I

LO related to dynamics of structures and earthquake engineering

LO related to geotechnical engineering

LO related to stability of structures

Language(s) of Instruction: English, Croatian, French

Volume of Learning: 1440 hours Maximum Duration: 21 months

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An end to end Infrastructure

Standards

1. Europass learning model
2. Interoperability standards

Services

1. Issuer
2. Wallet
3. Viewer
4. Accreditation DB
5. Course & Qualification Search
6. Open Data Services

Software & support

1. eldas & Europass code libraries
2. ,docker' images
3. Qualifications Dataset Register
4. Playground
5. API libraries
6. Helpdesk