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# Joint European Degree Label in Engineering



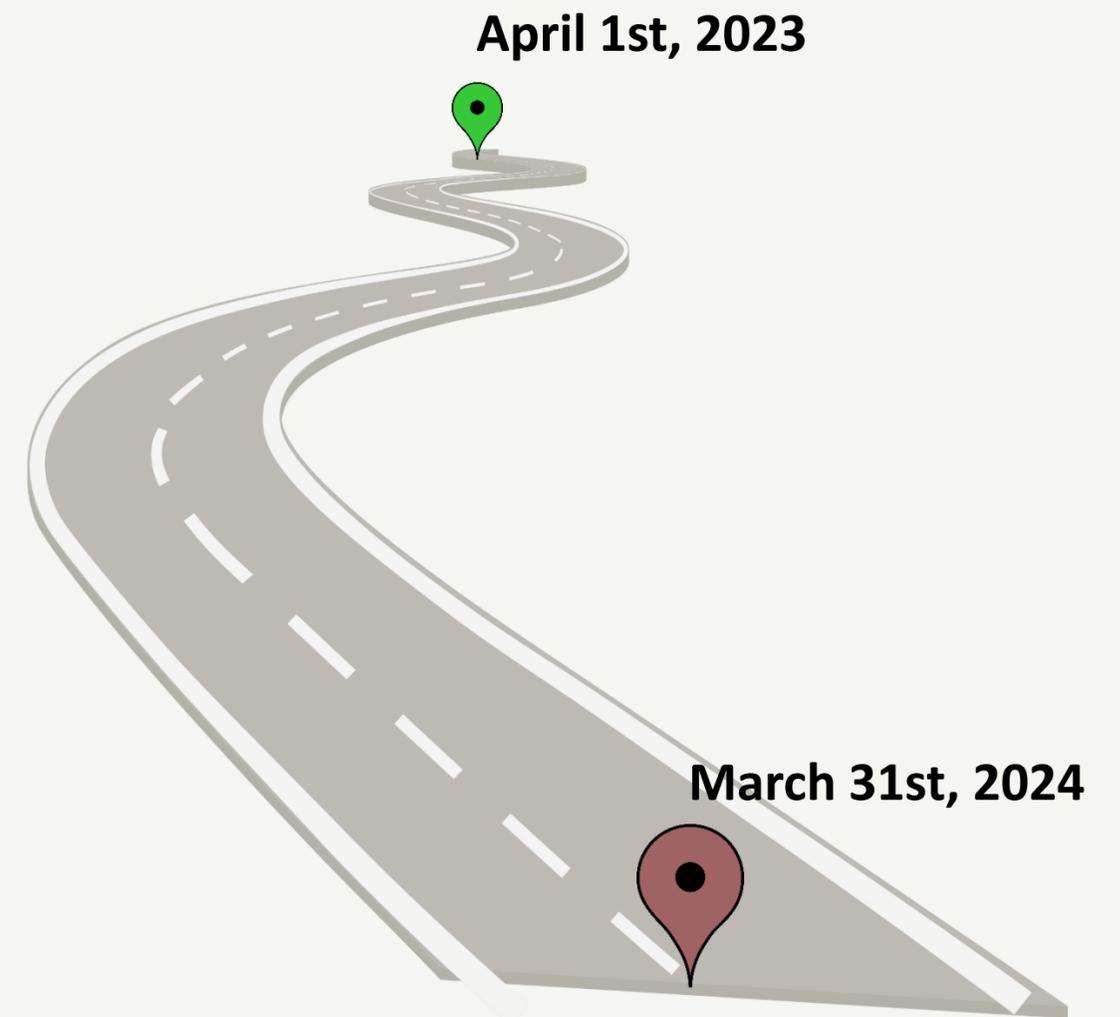
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Jornadas de Movilidad Erasmus+ de Educación Superior. SEPIE  
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# JEDI context

- Call ERASMUS-EDU-2022-POL-EXP: **European policy experimentation** in higher education under the Erasmus+ programme (2022)
- Objective: To **test** and **explore** deeper transnational cooperation instruments to further develop a genuinely European dimension in the higher education sector.
- European degree label criteria
- ➔ • **Topic 1 (6 projects): Pilot a joint European degree label.**
- **Topic 2 (4 projects):** Pilot institutionalized EU cooperation instruments to explore the feasibility for a possible European **legal status** for alliances of HEIs.





# JEDI objectives

- **Develop a prototype label for European joint degrees**, based on the **common set of European criteria** proposed by EC adjusted and co-developed with partners and stakeholders and applicable to any European joint degree in **engineering, technology and science-oriented degrees**.
- **Redefine the education of engineering, technology and science-oriented degrees in Europe**.
- Under the perspective of **alliances focused on engineering**, JEDI aims to **raise the maturity** of the label from **TRL2** (proof of concept formulated and encouraged by the EC) to **TRL8** (label complete, tested and qualified).
- JEDI relies on **desk research, consultations with agencies, universities and stakeholders for validation of separate criteria** and demonstration of a prototype label in existing and emerging joint degrees.





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# JEDI project: 3 Alliances, 16 universities, 11 countries

European University

POLITÉCNICA | UNIVERSIDAD POLITÉCNICA DE MADRID

École des Ponts ParisTech

ITÜ | İSTANBUL TEKNİK ÜNİVERSİTESİ

PSL | UNIVERSITÉ PARIS

POLITEHNICA | UNIVERSITATEA POLITEHNICA DE BUCUREȘTI

M Ű E G Y E T E M 1 7 8 2

EU+ EUROPEAN UNIVERSITY OF TECHNOLOGY

ΤΕΧΝΟΛΟΓΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΚΥΠΡΟΥ

h\_da DARMSTADT UNIVERSITY OF APPLIED SCIENCES

1862 RĪGAS TEHNISKĀ UNIVERSITĀTE

DUBLIN CITY UNIVERSITY

TECHNICAL UNIVERSITY OF SOFIA

Universidad Politécnica de Cartagena

utt UNIVERSITÉ DE TECHNOLOGIE TROYES

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA

ENHANCE European Universities of Technology Alliance

CHALMERS UNIVERSITY OF TECHNOLOGY

UNIVERSITAT POLITÈCNICA DE VALÈNCIA





# JEDI organization

## WP1

**General management, coordination, communication and dissemination**

## WP2

**Assessment of the current situation**

Added value and EU joint degrees and screening of candidates JDs

## WP3

**Developing the JEDI Label**

3 focused colabs (tasks groups) to foster close collaboration with diverse stakeholders

## WP4

**Recommendations & Long-term vision**

Focus group with stakeholders (accreditation agencies, ministries, HEI..)



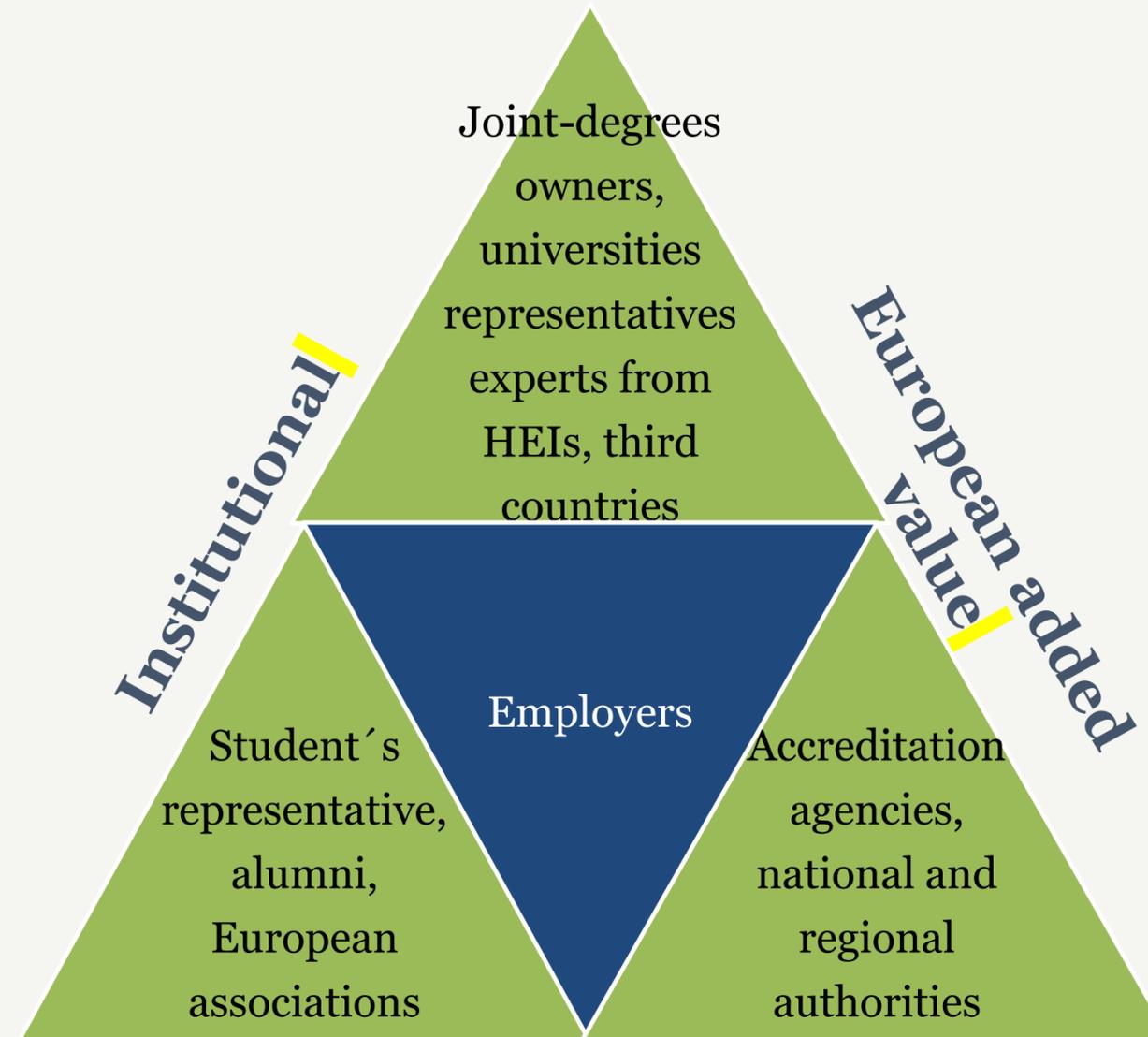
# JEDI work. Participation of stakeholders

Surveys

Focus groups

Collabs

Interviews



**Innovative learning approach**



# Important definitions by EQAR

**Joint programmes** are understood as an integrated curriculum coordinated and offered jointly by different higher education institutions from EHEA countries, and leading to double/multiple degrees or a joint degree.

**Double/multiple degrees:** Separate degrees awarded by higher education institutions offering the joint programme attesting the successful completion of this programme (if two degrees are awarded by two institutions, this is a 'double degree').

**Joint degree:** A single document awarded by higher education institutions offering the joint programme and nationally acknowledged as the recognised award of the joint programme.



# Surveying the current situation

- **Graduates** from **European engineering** programmes are **worldwide recognized** and **prestigious** professionals.
- Engineering degrees (also for regulated professions) conceived as verticals with **large specialization** but with few interdisciplinary, flexible mobility and transversal components.
- Diversity of **national legislation** defining the requirements of degrees for regulated engineering professions.
- Large number of **multiple engineering degrees** across Europe, but specific joint degrees initiatives.
- Experience accumulated mostly in **joint programmes** in engineering at **Master's level** (EQF 7).
- Students trust in well-known and renowned national degrees combined with **hesitancy** to enrol in **new academic programmes**.



# Differential aspects of engineering

- **EUR-ACE® label** sets up a common quality framework for engineering degree programmes.
- For **regulated professions**, the definition of the joint European degree should balance the **specificities** of each EU region and the flexibility in the definition of **programme outcomes**.
- Engineering, technology and science-oriented programmes in Europe **share contents and skills** to a large extent.
- Relevant role of **engineering graduates** to leverage **European competitiveness**.
- Engineering needed to **strengthen technology sovereignty** of Europe in **critical technology** areas.

# European criteria for Joint European Degrees

## Transnational programme organisation and management

- Higher education institutions involved
- Transnational joint degree delivery
- Joint arrangements for the joint programme
- Quality assurance arrangements
- Graduate tracking

## Learning experience

- Student-centred learning
- Interdisciplinarity
- Labour market relevance
- Digital skills
- Transnational campus – access to services
- Flexible and embedded student mobility
- Co-evaluation and co-supervision for dissertations

## European Values

- Democratic values
- Multilingualism
- Inclusiveness
- Green transition

# European criteria for Joint European Degrees

European criteria for a European degree (label)			EQF Levels
Transnational programme organisation and management	Higher education institutions involved	The joint programme is offered by at least 2 higher education institutions from at least 2 different Member States.	6, 7, 8
	Transnational joint degree delivery	The joint programme is jointly designed and jointly delivered by all the higher education institutions involved.	6, 7, 8
		The joint programme leads to the award of a joint degree.	6, 7, 8
		A joint Diploma Supplement <sup>2</sup> is issued to students.	6, 7
		The joint programme describes the learning outcomes and credits in line with the ECTS Users Guide.	6, 7
	Joint arrangements for the joint programme	The joint programme has joint policies, procedures and/or arrangements defining curriculum planning and delivery, as well as all organisational and administrative matters. Students' representatives are part of the decision-making process to define the joint policies and procedures and/or arrangements.	6, 7, 8
	Quality assurance arrangements	Internal and external Quality Assurance is conducted in accordance with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). The higher education institutions, the study field or the programme are evaluated by an EQAR registered agency.	6, 7, 8
		The joint programme is evaluated using the standards of the European approach for quality assurance of joint programmes (EA).	6, 7, 8
	Graduate tracking	The joint programme monitors graduates through a graduate tracking system.	6, 7, 8

# European criteria for Joint European Degrees

Learning experience	Student-centred learning	The joint programme is designed and continuously enhanced and delivered in a way that encourages students to take an active role in the learning process. Assessment of students reflects this approach.	6, 7, 8	
	Interdisciplinarity	The joint programme includes embedded interdisciplinarity components.	6, 7, 8	
	Labour market relevance	The joint programme aligns with labour market requirements by incorporating intersectoral components or activities <sup>3</sup> and the development of transversal skills.	6, 7, 8	
	Digital skills	The joint programme includes components and actions related to the development of advanced digital skills of students, tailored to the capacities and circumstances of the joint programme, ensuring alignment with its scope and scholarly focus.	6, 7, 8	
	Transnational campus – access to services	The programme has joint policies for students and staff to have access to relevant services in all participating higher educational institutions under equivalent conditions as all enrolled students and local staff.	6, 7, 8	
	Flexible and embedded student mobility		The joint programme offers deep intercultural experience, including a minimum of 1 period of student physical mobility (that can be split in several stays) at one or more partner institution(s) representing overall at least 60 ECTS at EQF 6 level and 30 ECTS at EQF 7 level. The joint programme has a policy offering alternatives for students who are unable to travel.	6, 7
			The joint programme offers deep intercultural experience, including a total of at least 6 months of physical mobility at one or more partner institution(s). The joint programme has a policy offering alternatives for students who are unable to travel.	8
	Co-evaluation and co-supervision for dissertations	Dissertations are supervised by at least 2 supervisors and co-evaluated by co-supervisors or a committee with members from at least 2 different institutions located in 2 different countries.	8	

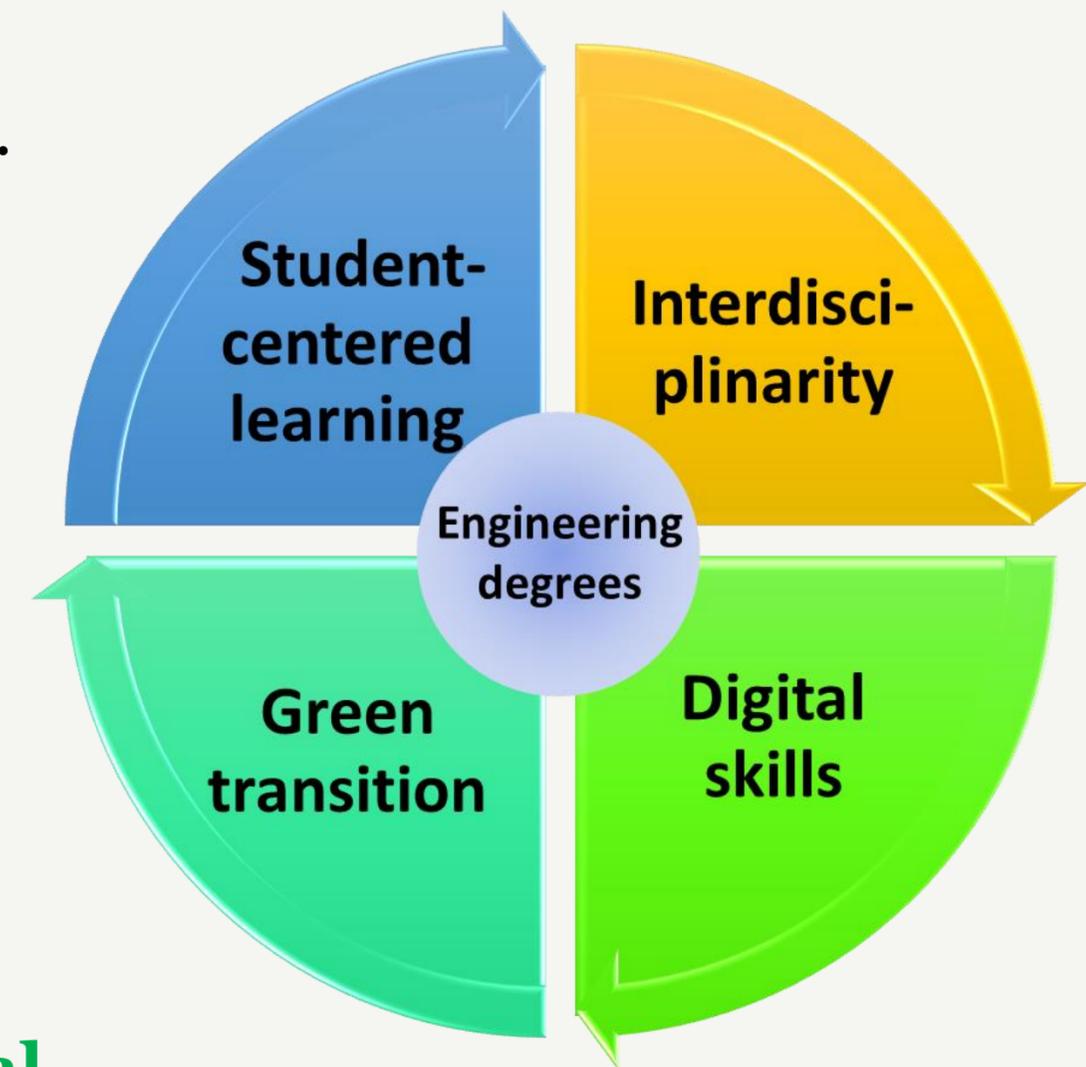
# European criteria for Joint European Degrees

European Values	Democratic values	The joint programme's joint policies promote and adhere to democratic values.	6, 7, 8
	Multilingualism	During the joint programme, each student is exposed to at least 2 different EU languages.	6, 7, 8
	Inclusiveness	The joint programme commits to wide participation by fostering diversity, equality, and inclusion and by adopting tailored measures to support students and staff with fewer opportunities.	6, 7, 8
		The joint programme commits to respect the principles of the European Charter for Researchers	8
	Green transition	The joint programme has policies and actions related to environmental sustainability and implements measures to minimise the environmental footprint of its activities.	6,7, 8



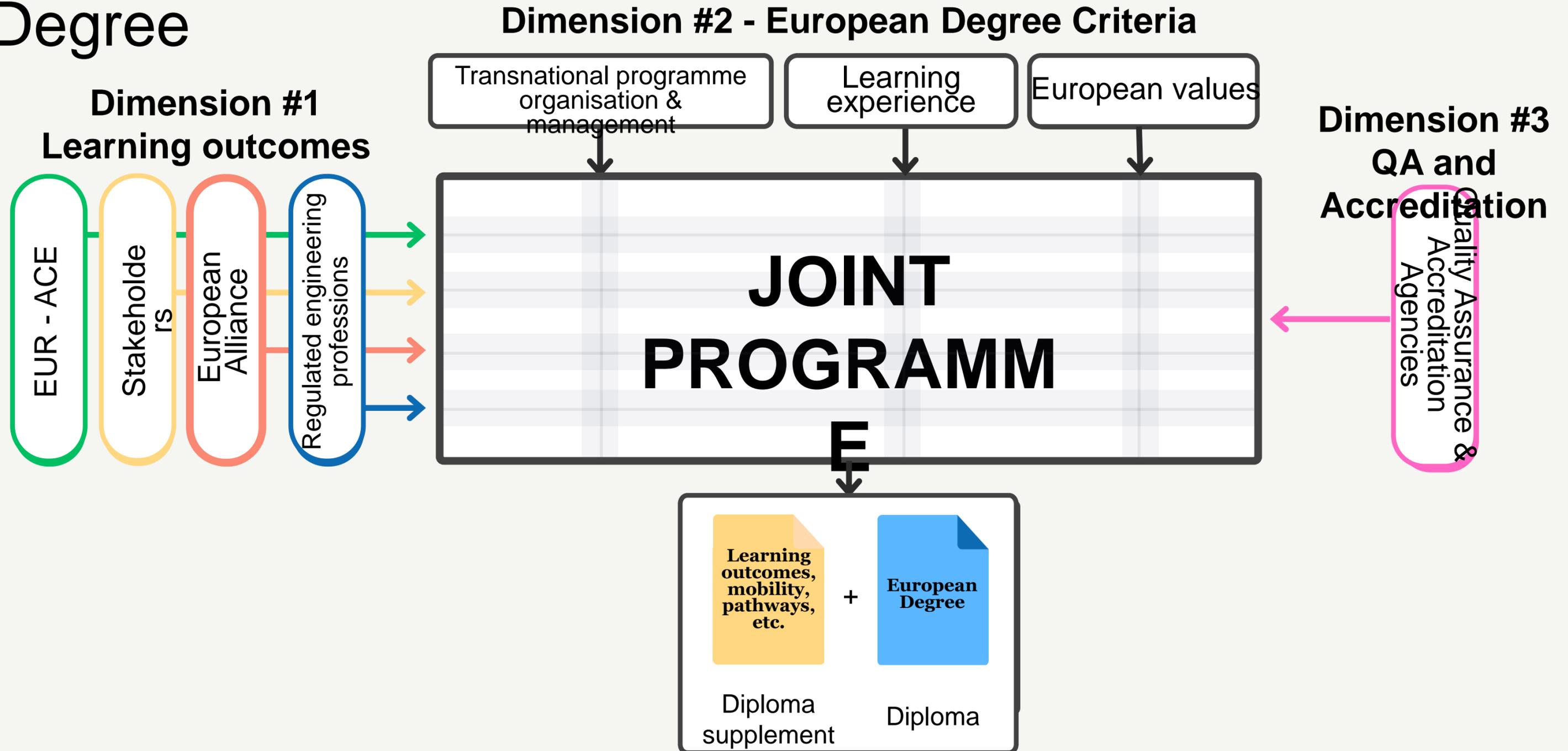
# Added value of European Degrees for engineering

- **Automatic recognition** of qualifications.
- Accommodation of **transformative learning experiences**.
- **Harmonize criteria** at European level for the **accreditation** of European degrees in engineering.
- Professional work across Europe through a **common understanding** of qualifications.
- Broader and more transparent **recruitment opportunities** and **talent attraction** in Europe and worldwide.
- **European belonging** as an inherent feature of the graduates.
- Position European engineering graduates as **leaders of digital and green transitions**.





# JEDI: Designing the joint programme for the European Degree





# EELISA European Engineer profile

***A model to shape today's higher education and impact tomorrow's society***



## 1. SKILLS

High level scientific, theoretical and digital skills with a cross-disciplinary approach

## 2. SUSTAINABILITY

Commitment to address sustainability and socio-environmental risks of new technologies

## 3. INTERCULTURALISM

Interculturalism and inclusiveness, embracing a pan-European perspective

## 4. CRITICAL THINKING

Effective professional development through enhanced proficiency in business and communication skills, critical thinking, and practical and applied knowledge



# Concerns of European Commission in the «Blueprint for a European degree» relevant for engineering degrees

- Europe needs to be **more competitive** (Top 100 worldwide unicorns?)
- Europe needs to **reduce the technological dependence** with other regions worldwide (Top 100 worldwide platforms?)
- Europe needs to **attract talent** transforming itself into a **captivating area** (Ranking of the universities in technology?)



# European Education: « Blueprint for a European degree »

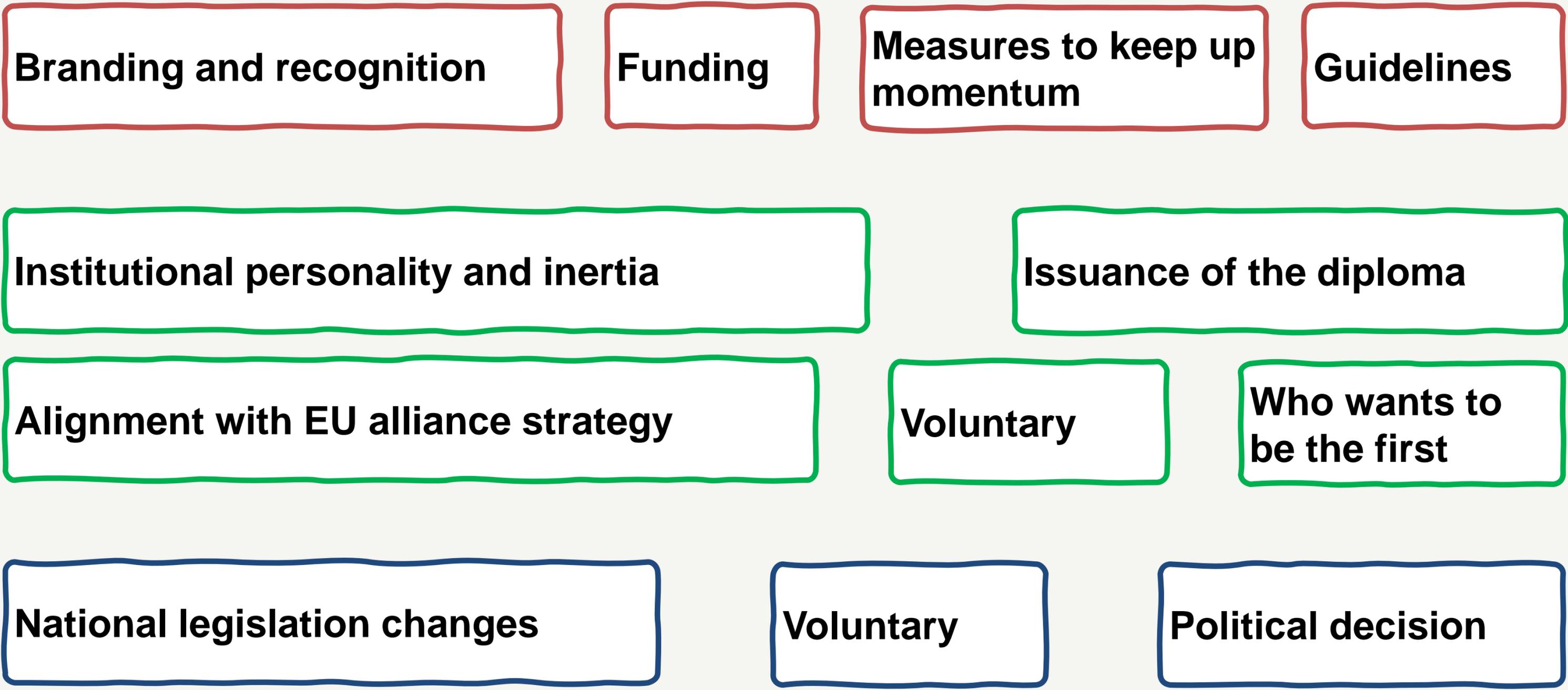
## ENTRY POINT: A PREPARATORY EUROPEAN LABEL

- Joint degree programmes meeting the European criteria may receive a European label from the competent authorities in charge of accreditation and/or quality assurance of higher education programmes (self-accrediting universities, accreditation agencies, quality assurance agencies).
- While the label will provide a powerful branding tool, it will not solve the obstacles encountered by universities to establish and run joint degree programmes.
- Open to universities after adopting the proposed European criteria and developing guidance to implement these.

## ENTRY POINT: A EUROPEAN DEGREE

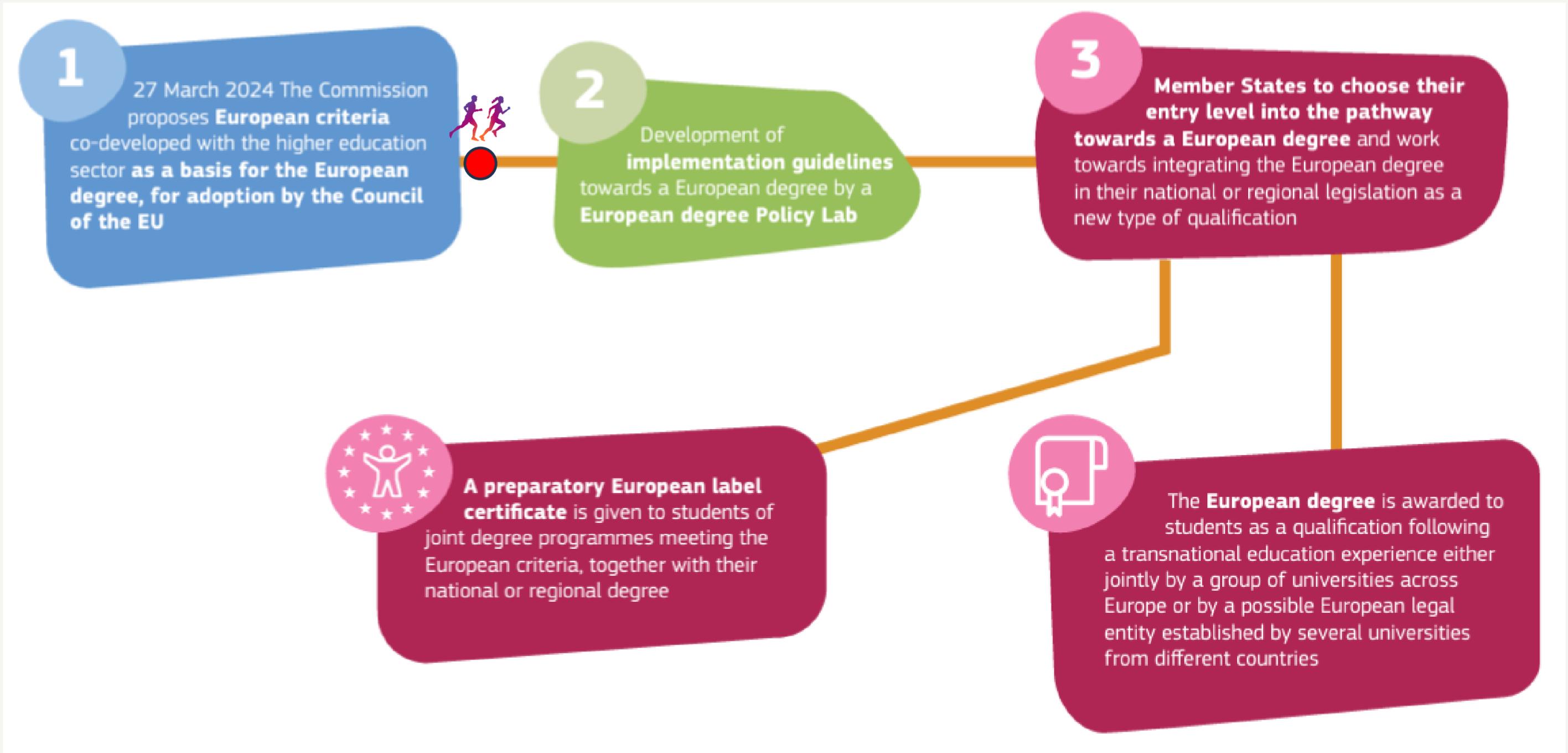
- Awarded jointly by several universities from different countries (e.g. a European University alliance)
- Integrated into national legislation as a new type of qualification. Significant simplification for universities and students by removing disparities between national rules and provides EU universities with a common and clear framework for creating joint degree programmes.
- Accredited in accordance with national legislation and national qualifications frameworks by the competent authorities at institutional, regional, or national level.
- A European degree could also be awarded by a legal entity established by several universities from different countries (e.g. a European University alliance with a legal status)

# Barriers and challenges





# European Commission: Way forward





# European Commission upcoming support

- A **European degree policy lab**: to develop detailed guidelines and action plans for the implementation of a European degree with national experts, higher education institutions, quality assurance/accreditation agencies, students, and economic and social partners
- A **new annual European degree forum**: to monitor progress and provides guidance, gathering high-level representatives from EU countries, key organisations in quality assurance and recognition, and representatives from economic and social partners
- **New Erasmus+ support for European degree Pathway Projects** enabling EU countries, together with their accreditation and quality assurance agencies, universities, students, economic and social partners, to navigate the pathway towards a European degree; and for **European degree Design Measures** to enable **higher education institutions** to adapt existing joint programmes or to create new ones leading to a European degree



# Information

- **JEDI Public Deliverables**

- D2.1. Why a European label for technical engineering and science-oriented degrees?
- D2.2. List of European joint degrees in engineering, technology, and applied sciences in Europe
- D3.1. Colabs report
- D3.2. The JEDI label: guidelines for application to joint degrees
- D4.1. White paper: an integrated European framework for engineering education
- Available at: <https://blogs.upm.es/jedilabel/>



- **European Commission - Blueprint of a European Degree**

- [https://education.ec.europa.eu/sites/default/files/2024-03/European\\_Degree\\_factsheet\\_EN\\_final.pdf](https://education.ec.europa.eu/sites/default/files/2024-03/European_Degree_factsheet_EN_final.pdf)
- <https://education.ec.europa.eu/news/commission-presents-a-blueprint-for-a-european-degree>
- <https://education.ec.europa.eu/document/annexes-to-the-proposal-for-a-council-recommendation-on-a-european-quality-assurance-and-recognition-system-in-higher-education>



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