Engirank

European Ranking of Engineering Programs

New approach to design of regional and discipline-oriented rankings

Tashkent, 27 April 2023

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Accelerating Science


VISIBILITY


VISIBILITY
REPUTATION
PRESTIGE
Intangible assets
with tangible results

Why Rankings by Subject

enables like-for-like comparison and enhances trustworthiness of rankings

Tashkent, 27 April 2023

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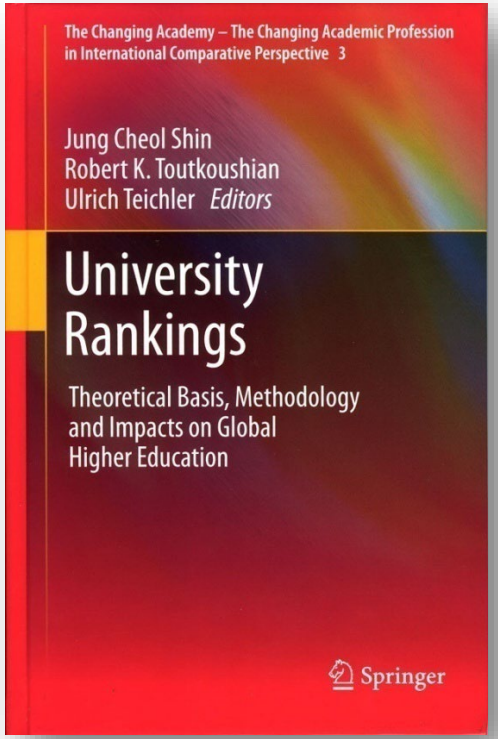

Rankings in Transition

What is the place of rankings by subject in the global ranking system?

University rankings are in transition. They have to respond to critique, especially **irrelevance of comparing completely different institutions, rankings provide benefits to rankers and impose major impacts on other stakeholders**.

Jung Cheol Shin (Seoul National University), Robert K. Toutkoushian (University of Georgia): *The Past, Present, and Future of University Rankings,* 2011

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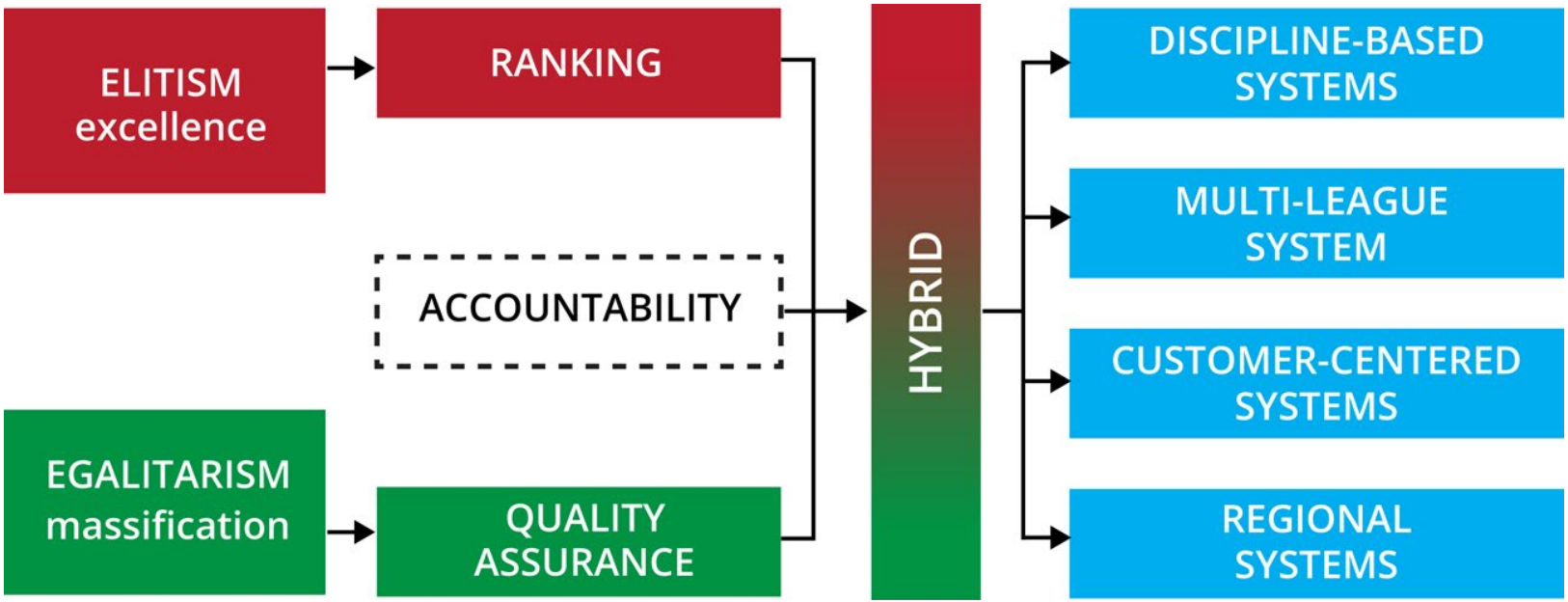
Future direction of rankings



Jung Cheol Shin, Robert Toutkoushian: *„Past, Present and Future of Academic Rankings"*

Future direction

DISCIPLINE-BASED SYSTEMS

Institutional ranking systems should become *discipline-based ranking systems* in order to reflect disciplinary differences.

MULTI-LEAGUE SYSTEM

Current unified ranking systems should become *multiple ranking systems* to reflect different institutional missions, size etc.

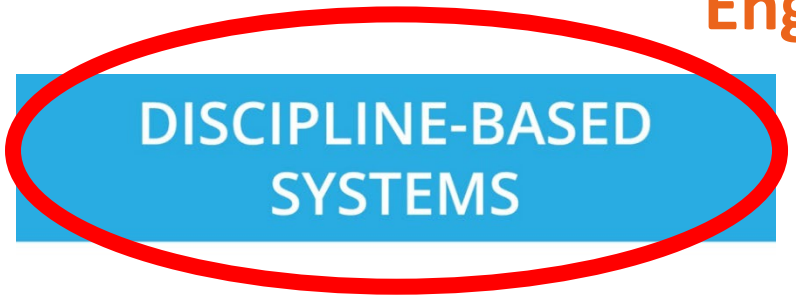
CUSTOMER-CENTERED SYSTEMS

Ranker-centered systems should become *customer-centered systems* to satisfy readers' differing needs for rankings

REGIONAL SYSTEMS

Global ranking systems should become *regional ranking systems* to reflect regional characteristics, like language, culture etc.

EngiRank's response to the critique



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Scientists study the world as it is, engineers create the world that never has been.

Theodore von Kármán

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European Ranking on Engineering Programs

Mission

EngiRank Mission

European Ranking of Engineering Programs (EngiRank) will compare programs in the main engineering disciplines (by subject) and classify European universities of technology. The purpose and mission of this ranking is to popularize the most effective engineering programs that will respond to needs of main stakeholders.

OECD Fields Of Research and Development (FORD)

2. Engineering and Technology

2.1 Civil engineering

2.2 Electrical engineering, electronic engineering, information engineering

2.3 Mechanical engineering

2.4 Chemical engineering

2.5 Materials engineering

2.6 Medical engineering

2.7 Environmental engineering

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European Ranking on Engineering Programs

Stakeholders

The principal stakeholders of the ranking:

- **Prospective students and their parents** – will help select the desired university and/or field of study,
- **Employers** – will help find and recruit best candidates for a job,
- **University managers** – will help benchmark their institution against other universities and monitor quality of activities,
- **Policy makers** – will inform policy-making in the field of higher education.

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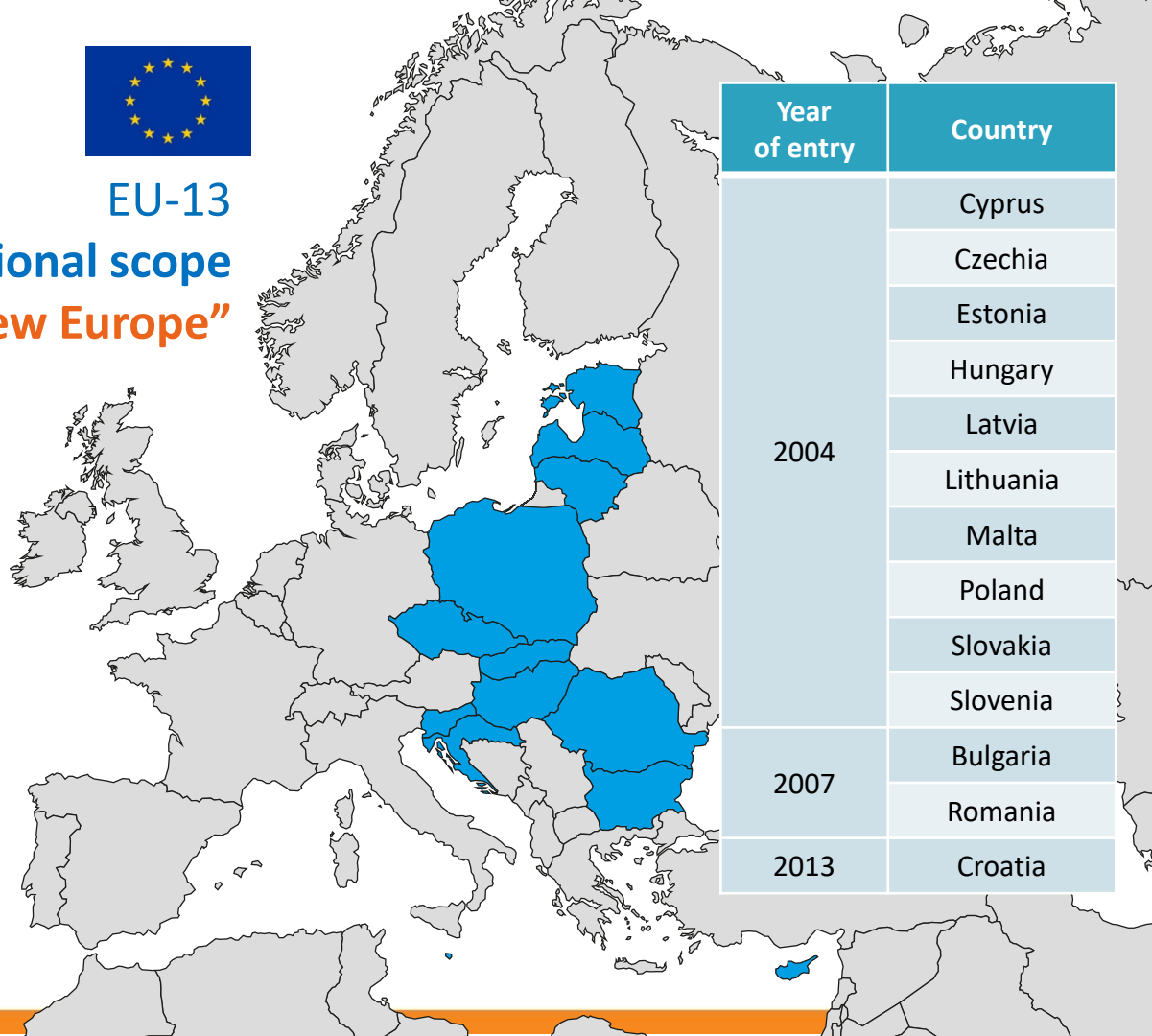
Engi rank

European Ranking on Engineering Programs

EU-13
Regional scope
„New Europe”



Year of entry	Country
2004	Cyprus
	Czechia
	Estonia
	Hungary
	Latvia
	Lithuania
	Malta
	Poland
	Slovakia
	Slovenia
2007	Bulgaria
	Romania
2013	Croatia

countries in the 1st edition of EngiRank

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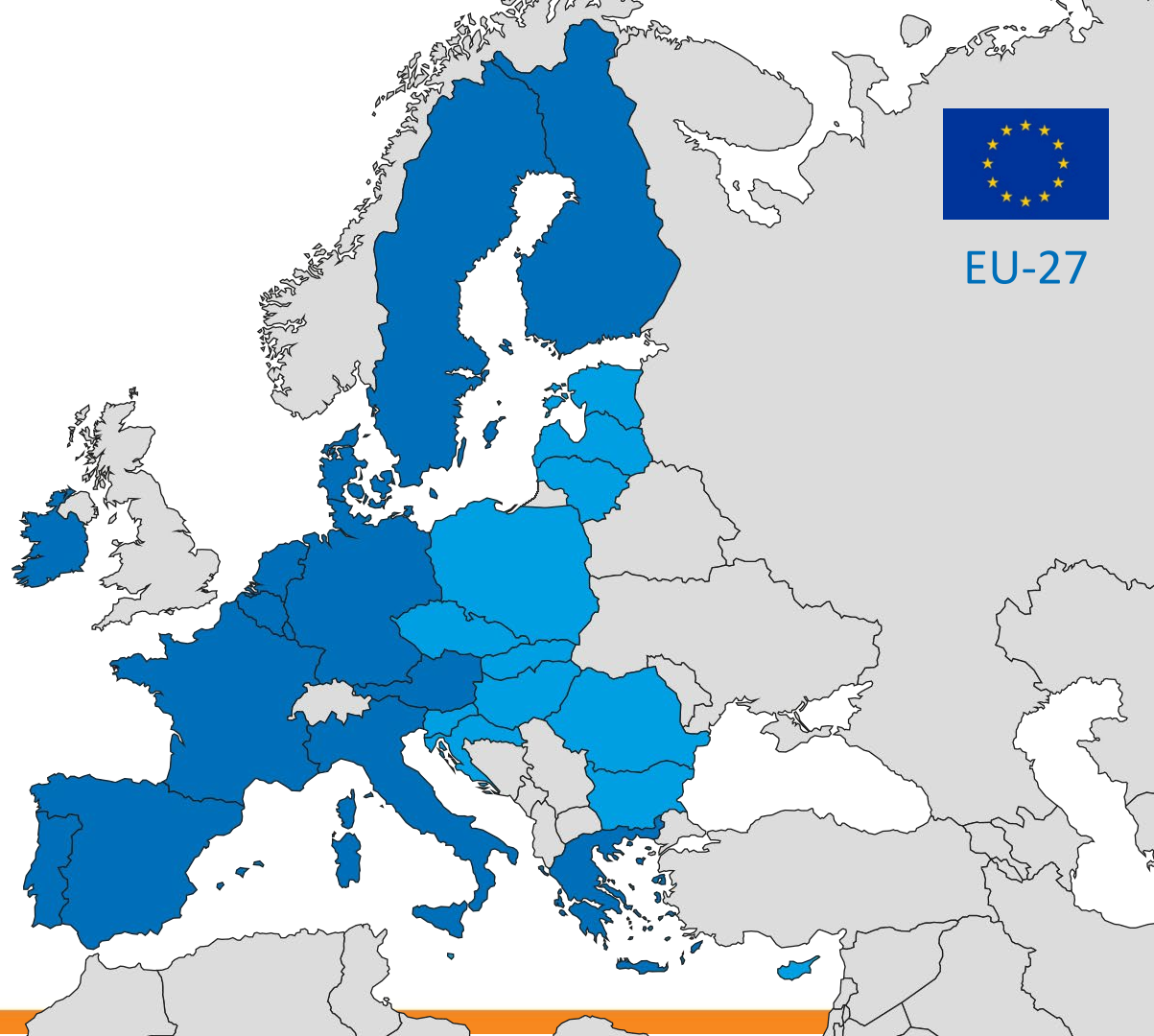
European Ranking on Engineering Programs

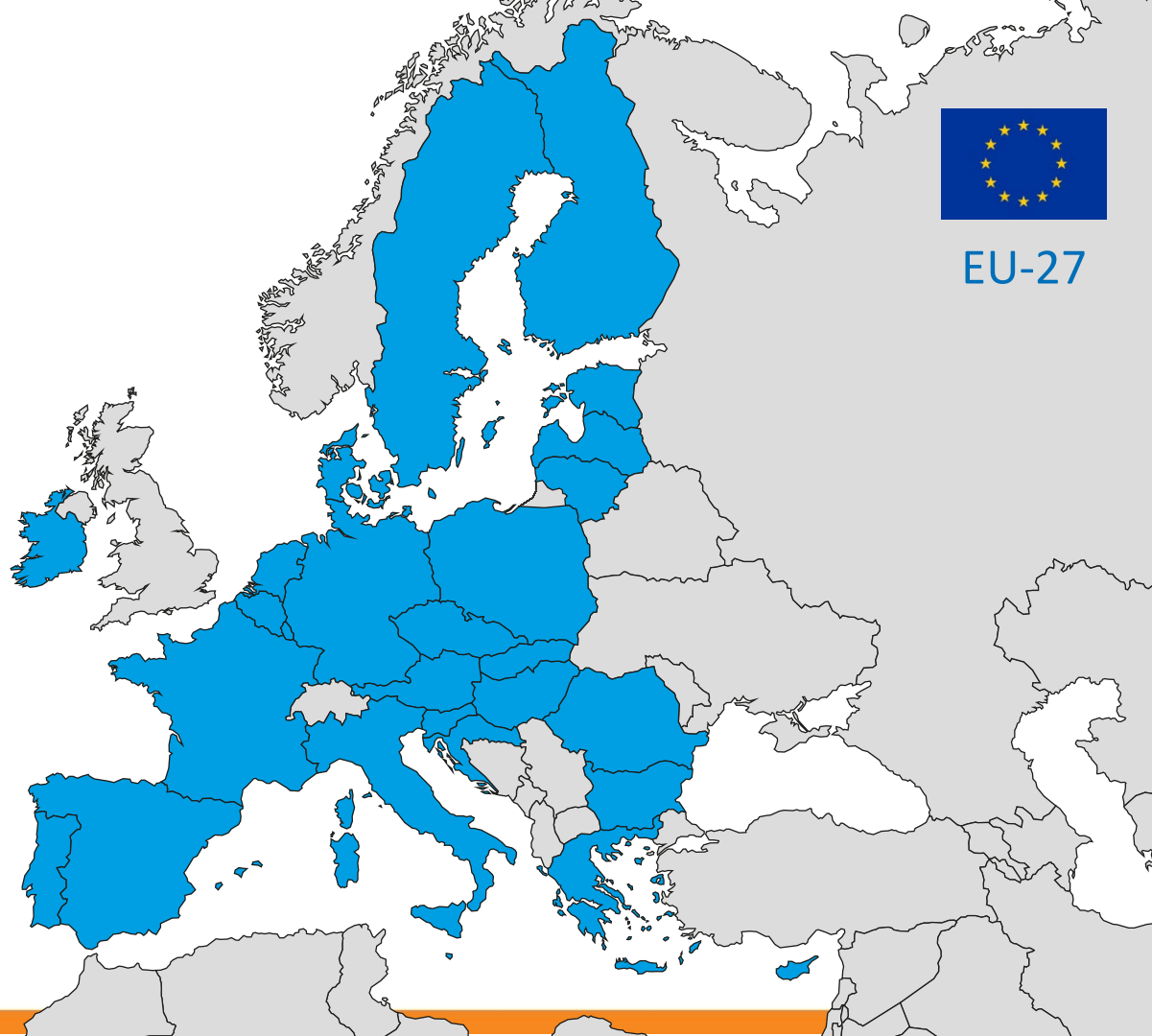


countries in the 1st edition of EngiRank

countries added in the 2nd edition of EngiRank

Engirank

European Ranking on Engineering Programs



countries in the 2nd edition of EngiRank

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European Ranking on Engineering Programs

Partners

EngiRank produced by

Perspektywy Education Foundation (Poland)

in partnership with

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ELSEVIER

Perspektywy thanks ELSEVIER for close cooperation in designing the ranking and providing the data.

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Entry criteria

The **European Ranking of Engineering Programs „by subject”** (2nd-level FORD discipline) includes institutions that meet the following criteria:

- publications of the institution are indexed in Scopus;
- at least 200 documents published in a given discipline in 2017-2021 are indexed in Scopus (for civil engineering, environmental engineering and medical engineering the threshold is 100 publications);
- share of publications from medical sciences or social sciences in 2017-2021 does not exceed 50%.

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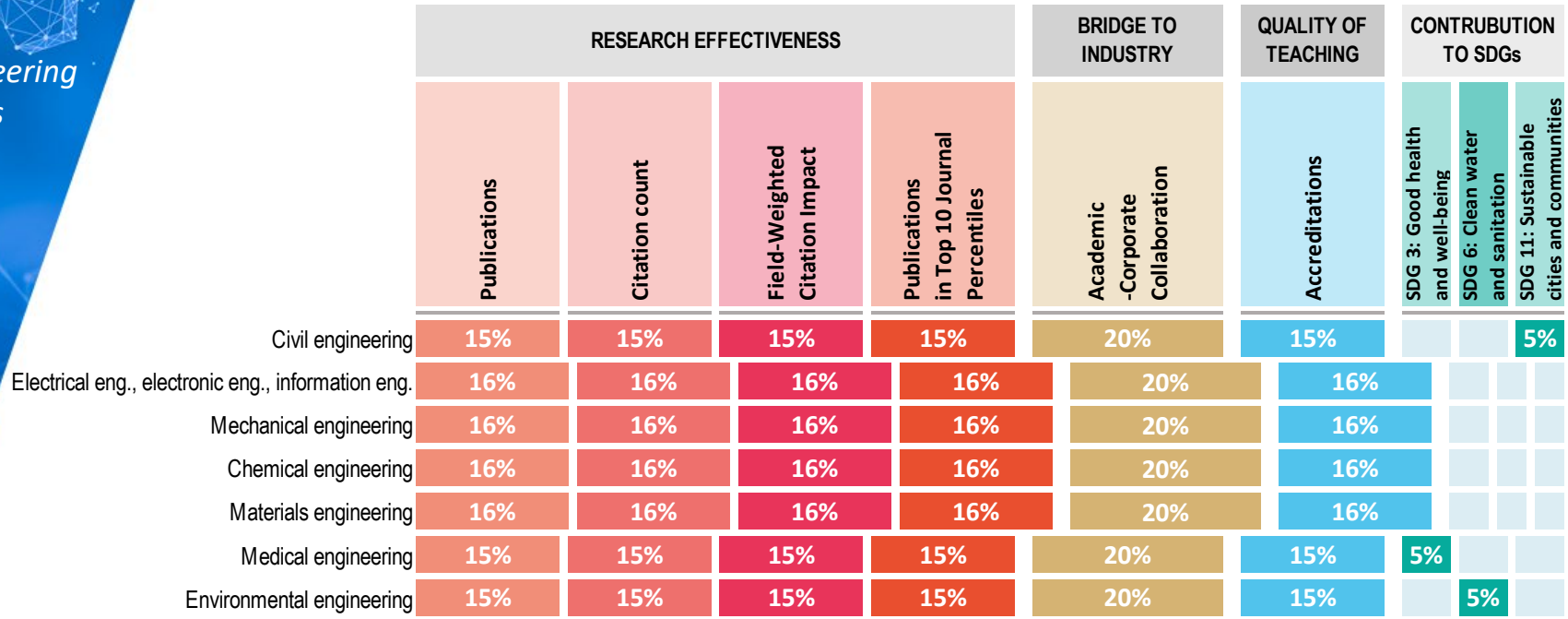
Ranking by subject



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Institutional Ranking

INNOVATION (36%)

- **External funding for research:** value of grants awarded within the EU Framework Program for Research and Innovation (Horizon) since 2017 in relation to the number of researchers (authors in the Scopus database). *Source: CORDIS, Scopus (16%)*
- **Patents:** number of patents granted to the institution by the European Patent Office in 2017-2021. *Source: EPO-PATSTAT (12%)*
- **Patent-Citation Count per Scholarly Output:** average number of patent citations received per 1,000 scholarly outputs published by the university in Engineering and Technology (FORD classification) in 2017-2021. *Source: SciVal (8%)*

PRESTIGE (5%)

- **National recognition:** institution's position in the most recent national rankings (in the case where no national ranking is available, the Webometrics data will be used). *Source: IREG Inventory of national rankings, Webometrics (5%)*

Institutional Ranking

INTERNATIONALIZATION (19%)

- **International Collaboration Impact:** average number of citations received by scholarly output published by the university in Engineering and Technology (FORD classification) in 2017-2021 that have international co-authorship. *Source: SciVal (10%)*
- **Student mobility (outbound):** ratio of outbound students of the Erasmus+ program to the total number of students in 2017-2021. *Source: Erasmus+, SciVal (3%)*
- **Student mobility (inbound):** ratio of inbound students of the Erasmus+ program to the total number of students in 2017-2021. *Source: Erasmus+, SciVal (3%)*
- **Student internships:** ratio of students going abroad for internships to the total number of students in 2017-2021. *Source: Erasmus+, SciVal (3%)*

CONTRIBUTION TO SDG 9 (5%)

- **SDG 9:** numer of publications of the university mapped to SDG 9: Industry, innovation and infrastructure. *Source: Scopus, SciVal (5%)*

Institutional Ranking

E&T COMPREHENSIVENESS (35%)

- **Engineering and Technology Comprehensiveness:** sum of scores received by the university in each of 7 rankings by subject.

Only universities ranked in at least 3 subjects will be classified in the institutional ranking.

For more information, please
observe our website:

www.EngiRank.eu