

A Universidade do Porto no Times Higher Education THE World University Rankings 2024 e THE World University Rankings by subject 2024

Reitoria da Universidade do Porto
Núcleo de Planeamento
28 de setembro de 2023
V2 20231027. Acrescenta THE WUR by Subject – cap 1.2 e 3

SUMÁRIO

1. Metodologia do THE WUR e THE WUR by Subject.....	2
1.1 Metodologia do THE WUR 2024	2
1.2 Metodologia do THE WUR by Subject 2024	5
1.3 Participação da U.Porto	6
2. THE WUR.....	7
2.1 A U.Porto no THE WUR	7
2.2. As Universidades portuguesas no THE WUR	10
3. THE WUR by subject	13
3.1 A U.Porto no THE WUR by subject	13
3.2 As Universidades portuguesas no THE WUR by subject 2024	18
3.2.1 Arts and humanities	18
3.2.2 Business and economics	19
3.2.3 Clinical and health.....	20
3.2.4 Computer science	21
3.2.5 Education	22
3.2.6 Engineering.....	23
3.2.7 Law	24
3.2.8 Life sciences	25
3.2.9 Physical sciences.....	26
3.2.10 Psychology	27
3.2.11 Social sciences	28
Anexo - Metodologia do THE WUR 2024	29

A Universidade do Porto no Times Higher Education World University Rankings 2024 e World University Rankings 2024 by subject

<https://www.timeshighereducation.com/world-university-rankings>
<https://www.timeshighereducation.com/world-university-rankings/by-subject>

1. Metodologia do THE WUR e THE WUR by Subject

1.1 Metodologia do THE WUR 2024

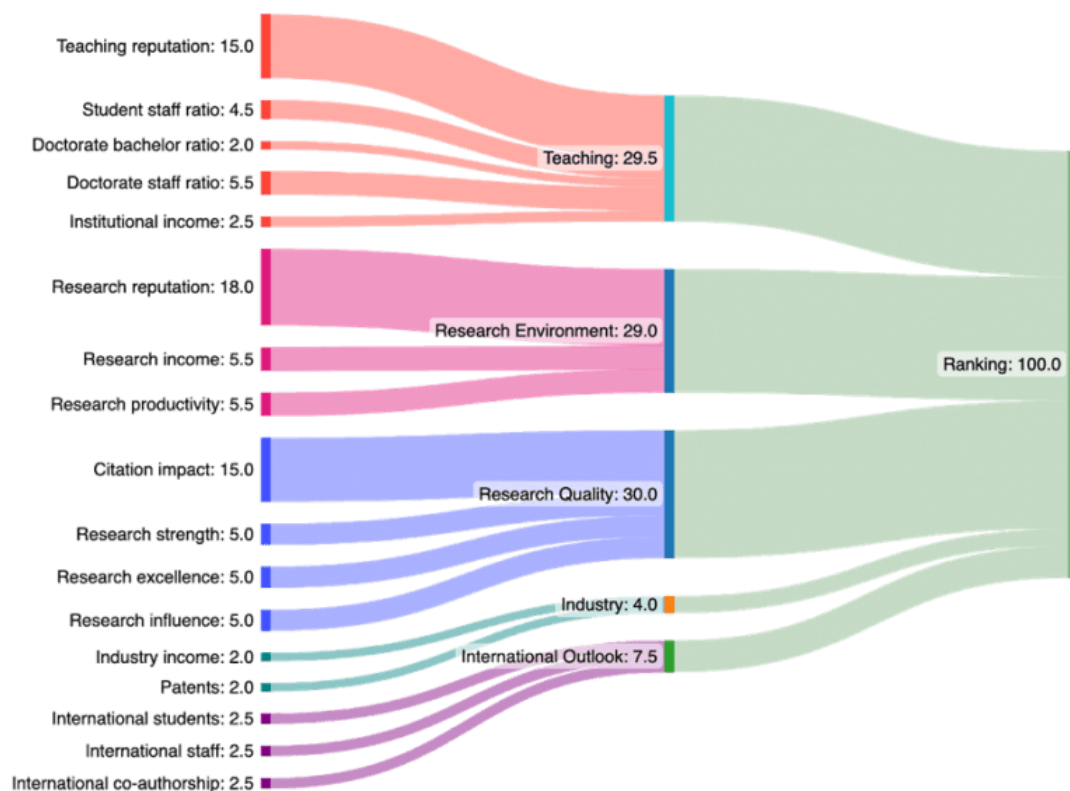
"The *Times Higher Education* World University Rankings are the only global performance tables that judge research-intensive universities across all their core missions: teaching, research, knowledge transfer and international outlook.

This year's methodology, for the 20th edition of the World University Rankings, has been significantly updated, so that it continues to reflect the outputs of the diverse range of research-intensive universities across the world, now and in the future.

We have moved from 13 to 18 carefully calibrated performance indicators to provide the most comprehensive and balanced comparisons, trusted by students, academics, university leaders, industry and governments. One of the metrics (study abroad) currently has zero weight but will be counted in future (see below).

The performance indicators are still grouped into five areas, although the names of these have been tweaked: Teaching (the learning environment); Research environment (volume, income and reputation); Research quality (citation impact, research strength, research excellence and research influence); International outlook (staff, students and research); and Industry (income and patents).

The full methodology is published in the file at the bottom of this page [ver [anexo](#)]



Teaching (the learning environment): 29.5%

- Teaching reputation: 15%
- Staff-to-student ratio: 4.5%
- Doctorate-to-bachelor's ratio: 2%
- Doctorates-awarded-to-academic-staff ratio: 5.5%
- Institutional income: 2.5%

The most recent Academic Reputation Survey (run annually, this year conducted by *THE*) that underpins this category was carried out between October 2022 and January 2023. We have run the survey to ensure a balanced spread of responses across disciplines and countries. Where disciplines or countries were over- or under-represented, *THE*'s data team weighted the responses to fully reflect the global distribution of scholars. The 2023 data are combined with the results of the 2022 survey, giving more than 500,000 votes to universities in 166 countries. Votes come from more than 68,000 cited academics.

As well as giving a sense of how committed an institution is to nurturing the next generation of academics, a high proportion of postgraduate research students also suggests the provision of teaching at the highest level that is thus attractive to graduates and effective at developing them. This indicator is normalised to take account of a university's unique subject mix, reflecting that the volume of doctoral awards varies by discipline.

Institutional income is scaled against academic staff numbers and normalised for purchasing-power parity (PPP). It indicates an institution's general status and gives a broad sense of the infrastructure and facilities available to students and staff.

Research environment: 29%

- Research reputation: 18%
- Research income: 5.5%
- Research productivity: 5.5%

The most prominent indicator in this category looks at a university's reputation for research excellence among its peers, based on the responses to our annual Academic Reputation Survey (see above).

Research income is scaled against academic staff numbers and adjusted for purchasing-power parity (PPP). This is a controversial indicator because it can be influenced by national policy and economic circumstances. But income is crucial to the development of world-class research, and because much of it is subject to competition and judged by peer review, our experts suggested that it was a valid measure. This indicator is fully normalised to take account of each university's distinct subject profile, reflecting the fact that research grants in science subjects are often bigger than those awarded for the highest-quality social science, arts and humanities research.

To measure productivity, we count the number of publications published in the academic journals indexed by Elsevier's Scopus database per scholar, scaled for institutional size and normalised for subject. This gives a sense of the university's ability to get papers published in quality peer-reviewed journals. From the 2018 rankings, we devised a method to give credit for papers that are published in subjects where a university declares no staff.

Research quality: 30%

- Citation impact: 15%
- Research strength: 5%
- Research excellence: 5%
- Research influence: 5%

Our research quality pillar looks at universities' role in spreading new knowledge and ideas.

We examine citation impact by capturing the average number of times a university's published work is cited by scholars globally. This year, our bibliometric data supplier Elsevier examined more than 134 million citations to 16.5 million journal articles, article reviews, conference proceedings, books and book chapters published over five years. The data include more than 27,950 active peer-reviewed journals indexed by Elsevier's Scopus database and all indexed publications between 2018 and 2022. Citations to these publications made in the six years from 2018 to 2023 are also collected.

The citations help to show us how much each university is contributing to the sum of human knowledge: they tell us whose research has stood out, has been picked up and built on by other scholars and, most importantly, has been shared around the global scholarly community to expand the boundaries of our understanding, irrespective of discipline.

The data are normalised to reflect variations in citation volume between different subject areas. This means that institutions with high levels of research activity in subjects with traditionally high citation counts do not gain an unfair advantage.

We have blended equal measures of a country-adjusted and non-country-adjusted raw measure of citations scores.

Three new research quality measures have been added in 2023. Research strength calculates the 75th percentile of field-weighted citation impact - a very robust guide to how strong typical research is.

Research excellence looks at the number of research publications in the top 10 per cent for field-weighted citation impact worldwide - a guide to the amount of world-leading research at an institution. It is normalised by year, subject and staff numbers.

Research influence helps us to understand when research is recognised in turn by the most influential research in the world - a broader look at excellence. The idea behind the metric is that the value of citations is not equal: a citation from an "important" paper is more significant than a citation from an "unimportant" one. We use an iterative method to measure the importance of a paper by not only counting the number of citations but also taking into account the importance of the citing papers. We also consider the subject of the research, as different disciplines have different citation patterns.

International outlook: 7.5%

- Proportion of international students: 2.5%
- Proportion of international staff: 2.5%
- International collaboration: 2.5%

The ability of a university to attract undergraduates, postgraduates and faculty from all over the planet is key to its success on the world stage. In the third international indicator, we calculate the proportion of a university's total relevant publications that have at least one international co-author and reward higher volumes. This indicator is normalised to account for a university's subject mix and uses the same five-year window as the "Research quality" category.

Large countries have been disadvantaged compared to small countries in our international metrics, in that it is "easier" for staff and students in small countries to work or study abroad. This has led us to change our normalisation approach for the three measures in 2023, henceforth taking into consideration the population of a country when evaluating these metrics.

A study abroad metric - assessing the provision of international learning opportunities for domestic students - complements the International Outlook pillar, but is currently given a weight of 0%. The zero weight is a temporary provision due to the impact of Covid-19 on international travel.

Industry: 4%

- Industry income: 2%
- Patents: 2%

A university's ability to help industry with innovations, inventions and consultancy has become a core mission of the contemporary global academy. The industry income metric seeks to capture such knowledge-transfer activity by looking at how much research income an institution earns from industry (adjusted for PPP), scaled against the number of academic staff it employs.

The metric suggests the extent to which businesses are willing to pay for research and a university's ability to attract funding in the commercial marketplace - useful indicators of institutional quality.

But the extent to which universities are supporting their national economies through technology transfer is an area that deserves greater recognition. The patents metric, introduced in 2023, is defined as the number of patents from any source that cite research conducted by the university.

The data are provided by Elsevier and relate to patents published between 2018 and 2022 (not research published between these dates). Patents are sourced from the World Intellectual Property Organisation, the European Patent Office, and the patent offices of the US, the UK and Japan.

This measure is subject-weighted to avoid penalising universities producing research in fields low in patents, and scaled for institutional size.

Exclusions

Universities can be excluded from the World University Rankings if they do not teach undergraduates, or if their research output amounted to fewer than 1,000 relevant publications between 2018 and 2022 (with a minimum of 150 a year). Universities can also be excluded if 80 per cent or more of their research output is exclusively in one of our 11 subject areas.

Universities at the bottom of the table that are listed as having “reporter” status provided data but did not meet our eligibility criteria to receive a rank. More information [here](#).

Data collection

Institutions provide and sign off their institutional data for use in the rankings. On the rare occasions when a particular data point at a subject level is not provided, we use an estimate calculated from the overall data point and any available subject-level data point. If a metric score cannot be calculated because of missing data points, it is imputed using a conservative estimate. By doing this, we avoid penalising an institution too harshly with a “zero” value for data that it overlooks or does not provide, but we do not reward it for withholding them.

Getting to the final result

Moving from a series of specific data points to indicators, and finally to a total score for an institution, requires us to match values that represent fundamentally different data. To do this, we use a standardisation approach for each indicator, and then combine the indicators in the proportions we detail above.

The standardisation approach we use is based on the distribution of data within a particular indicator, where we calculate a cumulative probability function, and evaluate where a particular institution's indicator sits within that function.

For most metrics, we calculate the cumulative probability function using a version of Z-scoring. The distribution of data in the metrics on teaching reputation, research reputation, research excellence, research influence and patents requires us to use an exponential component.”¹

1.2 Metodologia do THE WUR by Subject 2024

“Different weights and measures

The subject tables employ the same range of [18 performance indicators](#) used in the overall [World University Rankings 2024](#), brought together with scores provided under five categories.

However, the overall methodology is carefully recalibrated for each subject, with the weightings changed to suit the individual fields. In particular, those given to the research indicators have been altered to fit more closely the research culture in each subject [...]

Criteria

Two criteria determine eligibility for the *THE* subject rankings: a publication threshold by discipline and an academic staff* threshold by discipline. [...]”²

A metodologia integral é disponibilizada em [anexo](#)

¹In <https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2024-methodology>, acedido 27 de setembro de 2023.

² In <https://www.timeshighereducation.com/world-university-rankings-2024-subject-arts-and-humanities-methodology> , acedido 26 de outubro de 2023.

1.3 Participação da U.Porto

De 2010 a 2014, o THE WUR foi feito pela *Thomson Reuters* (atualmente *Clarivate*) e a Universidade do Porto participou no GIPP - *Global Institutional Profiles Project*³ fornecendo dados sobre estudantes, docentes, investigadores e financiamento. Até 2013, era reportada a lista de variantes de nome da Instituição na *Web of Science*; em 2014, esse pedido foi substituído pela lista de “*Divisions*” e *Affiliated Institutions*” da Universidade.

A partir de 2015, a informação sobre estudantes, docentes, investigadores e financiamento passou a ser solicitada diretamente pelo THE WUR, usando as mesmas definições dos anos anteriores. Deixou de ser pedida informação sobre variantes de nome ou estrutura da instituição.

Para esta edição, a informação solicitada dizia respeito ao ano de 2021, foi reportada em março de 2023 e validada pelo THE em maio.

³ <https://clarivate.com/webofsciencegroup/globalprofilesproject/>

2. THE WUR

2.1 A U.Porto no THE WUR

Evolução⁴ das posições da Universidade do Porto no THE WUR

	Ranking do Mundo	Ranking da Europa	Ranking da Ibero-américa	Ranking de Portugal
2011	301-350	130-156	7**	1*
2012	351-400	154-180	7-15	1***
2013	351-400	157-181	5-8	1(iv)
2014	n/d			
2015	401-500	202-253	10-20	2-5
2016	401-500	203-254	7-15	1-4
2017	501-600	257-297	10-23	1-5
2018	401-500	198-252	7-13	1
2019	401-500	195-240	8-12	2
2020	401-500	192-246	9-15	3
2021	401-500	192-243	8-15	2-3
2022	401-500	188-237	8-11	2
2023	401-500	185-232	8-11	1-3

* *Ex aequo* com a Universidade de Aveiro. ** *Ex aequo* com as universidades de Aveiro e Valência.

*** Juntamente com a U.Aveiro e a U.Minho

(iv) Juntamente com a U.Minho.

n/d A U.Porto não consta nas 400 primeiras posições.

Evolução dos 5 indicadores globais

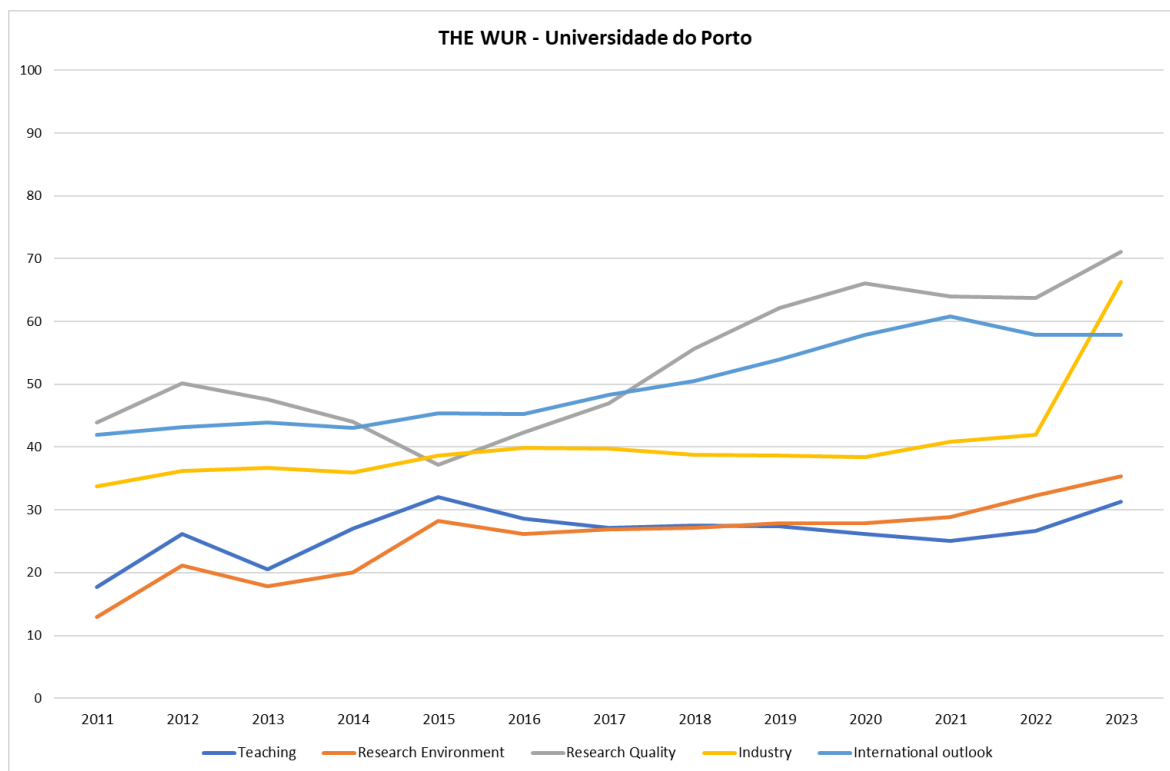
	Teaching	Research Environment	Research Quality	Industry	International outlook	Overall score ⁵	Rank
	30%→29,5%	30%→29%	30%	2,5%→4%	7,5%		
2011	17,7	13,0	43,9	33,7	42,0	26,4	301-350
2012	26,2	21,1	50,2	36,2	43,2	33,4	351-400
2013	20,5	17,8	47,6	36,7	43,9	30,0	351-400
2014⁶	27	20	44	36	43	31,4 [30,9-31,8]	--
2015	32,0	28,2	37,2	38,7	45,4	33,6	401-500
2016	28,6	26,2	42,3	39,9	45,3	33,5	401-500
2017	27,1	26,9	47,0	39,8	48,3	34,9	501-600
2018	27,5	27,2	55,7	38,8	50,5	37,9	401-500
2019	27,4	27,9	62,1	38,7	53,9	40,2	401-500
2020	26,2	27,9	66,1	38,4	57,9	41,4	401-500
2021	25,1	28,9	64	40,8	60,8	41,0	401-500
2022	26,6	32,3	63,7	41,9	57,9	42,2	401-501
2023	31,3	35,4	71,1	66,3	57,9	47,8	401-501

Como os valores de 2014 foram retirados do Perfil onde eram apresentados sem casa decimal, optou-se por acrescentar o intervalo do *Overall score*. O limite mínimo de 2014 é superior ao valor de 2013.

⁴ Dados até 2013 retirados de “Evolução das posições da Universidade do Porto nos rankings universitários”, janeiro de 2014, in https://sigarra.up.pt/up/pt/conteudos_service.conteudos_cont?pct_id=20113&pv_cod=55GoHdmanvlg_; dados de 2014 a 2022 foram retirados de <http://www.timeshighereducation.co.uk/world-university-rankings> respetivamente em 2 de outubro de 2014, 1 de outubro de 2015, 22 de setembro de 2016, 5 de setembro de 2017, 26 de setembro de 2018, 12 de setembro de 2019, 2 de setembro de 2020, 2 de setembro de 2021, 12 de outubro de 2022 e 27 de setembro de 2023.

⁵ O *Overall score* foi calculado usando as ponderações dos 5 indicadores.

⁶ Thomson Reuters, *Global Institutional Profiles Project 2014 Profile: University of Porto*.



Evolução⁷ dos 18 indicadores

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
TEACHING	Teaching reputation (15% =)	8	18	9	10	20,8	15	10,2	11	11,2	9,9	10	12,9	14,1
	Student staff ratio (4,5% =)	34	37	35	41	39,2	38	40,3	38,3	39,5	41,1	43,5	44	42
	Doctorate bachelor ratio (2,25% → 2,0)	34	41	40	51	47,2	48	47,6	52,1	51,4	51	47,2	46,7	61,8
	Doctorate staff ratio (6% → 5,5%)	24	35	29	49	45,4	48,1	47,1	49,8	47,9	44,1	36,7	37,4	53,3
	Institutional income (2,25% → 2,5%)	19	24	27	26	41	29	39,3	31,9	32,4	32,8	35,8	34,7	42,3
RESEARCH ENVIRONMENT	Research reputation (18% =)	6	15	6	8	18,9	12,6	8,2	7,6	8,1	7,2	6,8	12,1	14,8
	Research productivity (6% → 5,5%)	23	39	45	47	53,4	61,5	76,5	79,2	81,5	80,5	83,2	83,4	87,9
	Research income (6% → 5,5%)	24	23	25	28	30,9	31,7	33,5	33,8	33,8	37,4	41	41,7	50,5
RESEARCH QUALITY (Citations)	Citation impact (30% → 15%)	44	51	48	44	37,2	42,3	47	55,7	62,1	66,1	64	63,7	60,6
	Research strenght (0% → 5%)													57,3
	Research excellence (0% → 5%)													94
	Research influence (0% → 5%)													93,5
INDUSTRY	Industry income (2,5% → 2%)	34	36	37	36	38,7	39,9	39,8	38,8	38,7	38,4	40,8	41,9	39
	Patents (0% → 2%)													93,7
INTERNATIONAL OUTLOOK	International staff (2,5% =)	19	24	24	23	23,2	24,5	24,9	25,3	25,5	29,1	32,3	34,5	39,1
	International students (2,5% =)	30	35	36	38	39,9	39,5	45,5	52,7	61,9	70,3	75,3	65,5	73,3
	International co-authorship (2,5% =)	76	71	72	68	73,2	71,9	74,3	73,4	74,2	74,4	74,7	73,7	61,4
	Studying abroad (0%)													96,1

⁷ Thomson Reuters, Global Institutional Profiles Project 2011 Profile: University of Porto; Thomson Reuters, Global Institutional Profiles Project 2012 Profile: University of Porto; Thomson Reuters, Global Institutional Profiles Project 2013 Profile: University of Porto; Thomson Reuters, Global Institutional Profiles Project 2014 Profile: University of Porto; THEDataPoints. 2015. University of Porto; THEDataPoints. 2016 University of Porto; THEDataPoints. 2017. University of Porto; THEDataPoints. 2018. University of Porto; THEDataPoints. 2019. University of Porto; THEDataPoints. 2020. University of Porto; THEDataPoints. 2021. University of Porto; THEDataPoints. 2022. University of Porto e THEDataPoints. 2023. University of Porto.

2.2. As Universidades portuguesas no THE WUR

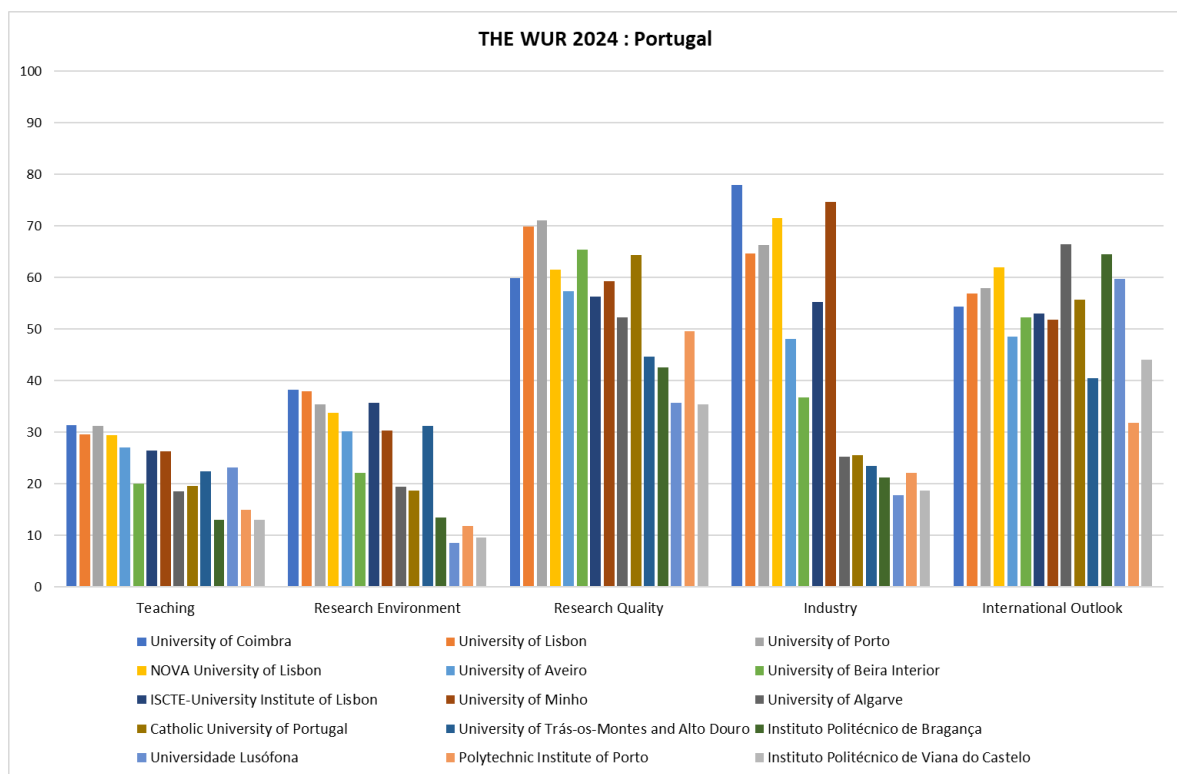
Posições

	Mundo			Europa			Ibero-América			Portugal		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
University of Coimbra	601-800	601-800	401-500	286-362	286-349	185-232	24-40	18-30	8-11	5-7	4-5	1-3
University of Lisbon	501-600	501-600	401-500	244-285	238-285	185-232	16-23	12-17	8-11	4	3	1-3
University of Porto	401-500	401-500	401-500	192-243	188-237	185-232	8-15	8-11	8-11	2-3	2	1-3
NOVA University of Lisbon	401-500	601-800	501-600	192-243	286-349	233-283	8-15	18-30	12-16	2-3	4-5	4
University of Aveiro	801-1000	801-1000	601-800	363-430	350-424	284-362	41-68	31-56	17-31	8-11	6-9	5-8
University of Beira Interior	601-800	801-1000	601-800	286-362	350-424	284-362	24-40	31-56	17-31	5-7	6-9	5-8
ISCTE-University Institute of Lisbon	601-800	801-1000	601-800	286-362	350-424	284-362	24-40	31-56	17-31	5-7	6-9	5-8
University of Minho	801-1000	801-1000	601-800	363-430	350-424	284-362	41-68	31-56	17-31	8-11	6-9	5-8
University of Algarve	801-1000	1001-1200	801-1000	363-430	425-493	363-426	41-68	57-93	32-61	8-11	10-14	9-11
Catholic University of Portugal	351-400	351-400	801-1000	164-191	167-187	363-426	7	7	32-61	1	1	9-11
University of Trás-os-Montes and Alto Douro	801-1000	1001-1200	801-1000	363-430	425-493	363-426	41-68	57-93	32-61	8-11	10-14	9-11
Instituto Politécnico de Bragança	n/c	1001-1200	1201-1500		425-493	502-596		57-93	84-131		10-14	12-14
Universidade Lusófona	n/c	1001-1200	1201-1500		425-493	502-596		57-93	84-131		10-14	12-14
Polytechnic Institute of Porto	1001-1200	1001-1200	1201-1500	431-493	425-493	502-596	69-100	57-93	84-131	12	10-14	12-14
Instituto Politécnico de Viana do Castelo			1501+			597+			132+			15
# IES	1662	1799	1904	643	700	739	189	209	215	12	14	15

n/c - não consta

Indicadores

	Teaching 30%→29,5%			Research Environment 30%→29%			Research Quality 30%			Industry 2,5%→4%			International Outlook 7,5%			Overall Score		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
University of Coimbra	24,5	25,1	31,4	32	35,2	38,2	45,4	40,4	59,9	47	49,8	78	60	59,5	54,3	32,0–37,9	34,0–39,2	45,4–49,0
University of Lisbon	24,8	26,4	29,6	32,6	35,7	38	56,2	53,4	69,9	42	43	64,7	60,6	60,4	56,9	38,1–40,8	39,3–42,0	45,4–49,0
University of Porto	25,1	26,6	31,3	28,9	32,3	35,4	64	63,7	71,1	40,8	41,9	66,3	60,8	57,9	57,9	40,9–44,0	42,1–44,9	45,4–49,0
NOVA University of Lisbon	25,3	23,7	29,5	29,5	31,1	33,7	70,4	42,4	61,5	49,7	54,5	71,5	63,6	64,2	62	40,9–44,0	34,0–39,2	41,9–45,3
University of Aveiro	23,3	25,9	27,1	23,8	25,7	30,2	42,4	40,2	57,3	37,5	39	48,1	50	50,4	48,6	27,2–31,9	29,8–33,9	37,0–41,8
University of Beira Interior	18,6	17,8	20,1	19,6	20,9	22,2	52,6	50,6	65,4	37,5	38,4	36,7	57,4	58,1	52,3	32,0–37,9	29,8–33,9	37,0–41,8
ISCTE-University Institute of Lisbon	27,8	24	26,4	28,8	32	35,7	39,6	36	56,3	40,8	41,8	55,2	53,8	55,5	53	32,0–37,9	29,8–33,9	37,0–41,8
University of Minho	24	24,4	26,3	22,8	28,9	30,3	38,6	38,8	59,3	52,3	58,9	74,7	57,1	57,6	51,9	27,2–31,9	29,8–33,9	37,0–41,8
University of Algarve	17,4	16,9	18,5	16,1	17,3	19,5	40,3	40,6	52,3	36,1	37,6	25,3	68,1	69,6	66,4	27,2–31,9	24,4–29,7	32,7–36,9
Catholic University of Portugal	19	20,2	19,6	14,5	19,2	18,7	98,3	97,8	64,4	36,6	38,8	25,6	62	62,8	55,7	44,1–46,0	45,0–46,9	32,7–36,9
University of Trás-os-Montes and Alto Douro	20,6	17,1	22,5	28,1	19,4	31,2	33,6	31,9	44,6	34,8	36,9	23,5	43,4	44,2	40,5	27,2–31,9	24,4–29,7	32,7–36,9
Instituto Politécnico de Bragança		13,5	13,1		12,6	13,5		43,3	42,6		40,3	21,2		67,3	64,5		24,4–29,7	22,8–28,2
Universidade Lusófona		18,4	23,2		11,4	8,6		36	35,7		38,7	17,8		67,4	59,7		24,4–29,7	22,8–28,2
Polytechnic Institute of Porto	14,5	14,3	15	9,8	11,2	11,9	51,6	46,3	49,6	35	37,1	22,1	36,5	36,7	31,8	22,4–27,1	24,4–29,7	22,8–28,2
Instituto Politécnico de Viana do Castelo			13			9,6			35,4			18,7			44,1			9,7–22,7
University of Coimbra	24,5	25,1	31,4	32	35,2	38,2	45,4	40,4	59,9	47	49,8	78	60	59,5	54,3	32,0–37,9	34,0–39,2	45,4–49,0



3. THE WUR by subject

3.1 A U.Porto no THE WUR by subject

Evolução⁸ das posições

		2017	2018	2019	2020	2021	2022	2023
Arts and humanities	Mundo	301-400	301-400	301-400	301-400	301-400	251-300	251-300
	Europa	158-200	155-207	158-211	158-207	157-208	138-159	139-162
	Iberoam	14-26	13-25	15-28	15-26	14-23	13-17	15-17
	PT	3-5	2-4	3-6	3-6	3-6	3-5	4
Business and economics	Mundo	n/c	401-500	401-500	501-600	501-600	601-800	401-500
	Europa	n/c	171-216	172-220	221-263	220-264	261-347	177-209
	Iberoam	n/c	18-33	17-34	31-41	27-43	38-73	18-25
	PT	n/c	4-7	4-9	8-9	7-9	8-10	6-7
Clinical and health	Mundo	251-300	251-300	251-300	251-300	301-400	251-300	251-300
	Europa	119-140	113-137	109-129	99-127	126-176	108-131	117-138
	Iberoam	8	9-10	9-13	13-17	18-25	10-13	6-9
	PT	1	1	1	3	3-4	2	1
Computer science	Mundo	n/c	401-500	401-500	401-500	401-500	401-500	301-400
	Europa	n/c	188-228	178-223	168-219	168-207	170-200	127-160
	Iberoam	n/c	20-29	14-28	11-23	10-21	11-15	2-9
	PT	n/c	3-4	2-4	2-4	1-2	1-2	1
Education	Mundo	n/c	126-150	176-200	251-300	301-400	201-250	101-125
	Europa	n/c	46-59	69-77	99-121	128-173	85-113	34-44
	Iberoam	n/c	3	9-12	16	14-29	9-15	3-4
	PT	n/c	1	2-3	4	3-4	2-3	1
Engineering	Mundo	301-400	401-500	301-400	301-400	401-500	401-500	301-400
	Europa	117-172	160-208	109-151	103-143	140-180	141-176	93-137
	Iberoam	5-20	14-31	4-12	3-9	6-17	4-9	2-7
	PT	2-6	3-7	1-2	1-2	2-4	1-2	1-2
Law	Mundo	n/c	n/c	n/c	n/c	n/c	n/c	201-250
	Europa							100-124
	Iberoam							13-21
	PT							4-5
Life sciences	Mundo	301-400	301-400	301-400	301-400	301-400	301-400	251-300
	Europa	149-189	144-187	140-188	139-185	140-190	134-184	109-130
	Iberoam	8-18	7-13	6-13	5-14	7-16	7-13	5-6
	PT	2-4	1-4	1-3	1-3	1-3	1-2	1-2
Physical sciences	Mundo	401-500	401-500	401-500	501-600	501-600	501-600	501-600
	Europa	203-244	194-237	194-232	227-272	222-258	214-248	215-246
	Iberoam	10-28	11-24	11-18	15-28	15-27	13-25	13-20
	PT	1-5	1-4	1-2	1-6	1-6	1-4	3-4
Psychology	Mundo	n/c	301-400	401+	401-500	401-500	301-400	251-300
	Europa	n/c	134-184	180+	183-225	182-228	147-190	111-131
	Iberoam	n/c	14-21	16+	21-43	23-39	8-18	6-8
	PT	n/c	5	4-5	5-6	3-5	2-4	3-4
Social sciences	Mundo	301-400	301-400	401-500	401-500	401-500	401-500	301-400
	Europa	137-182	140-181	178-228	178-226	183-223	181-224	143-177
	Iberoam	11-18	10-19	18-29	17-30	15-27	15-26	12-18
	PT	3-5	2-5	5-7	5-9	2-8	3-7	4-5

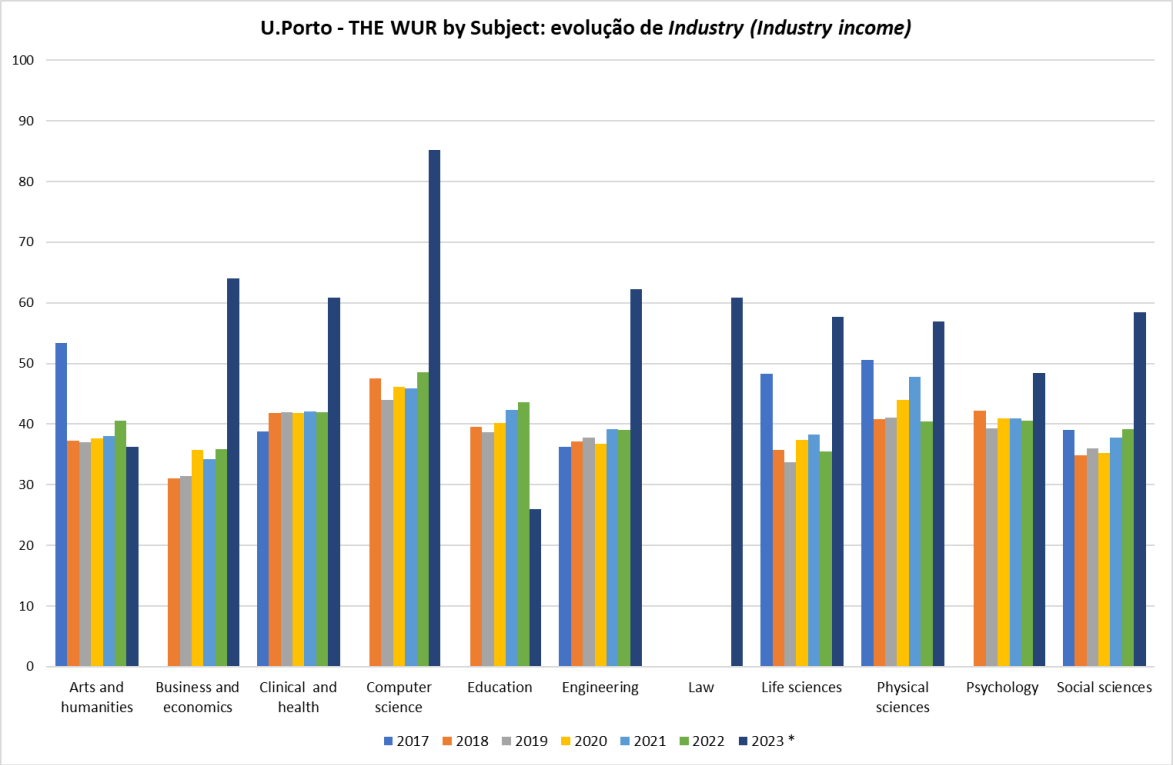
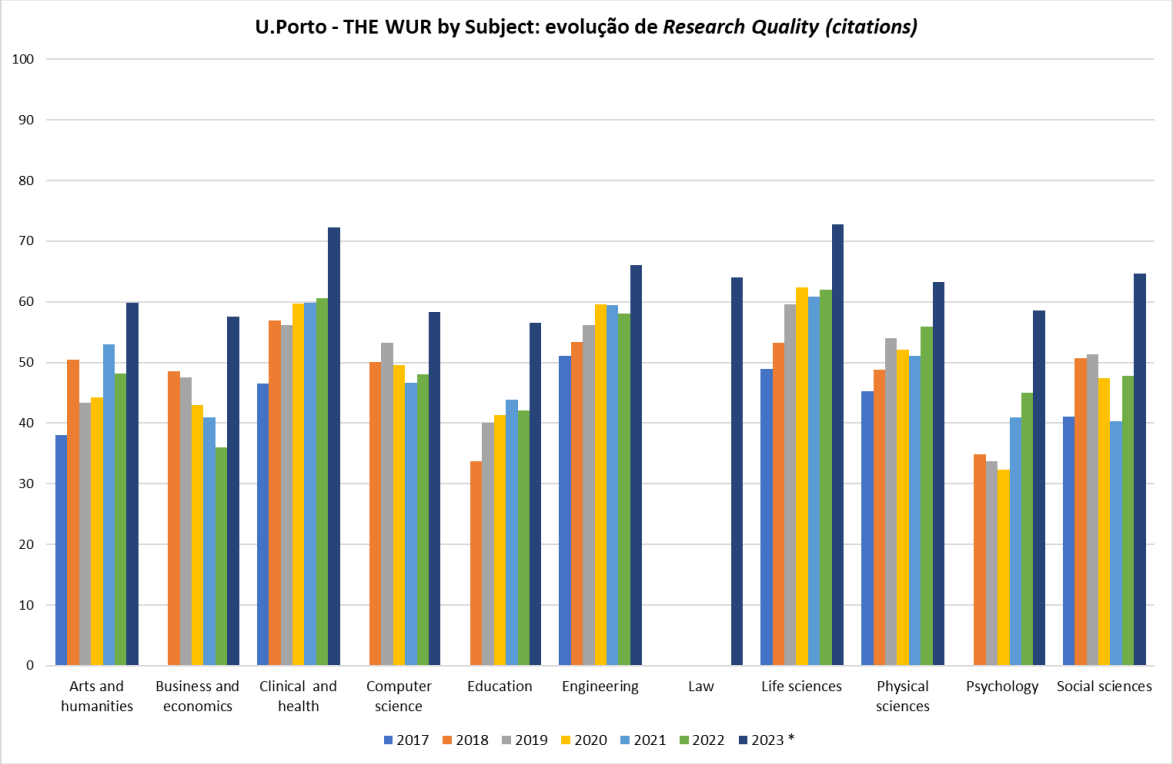
n/c- não consta

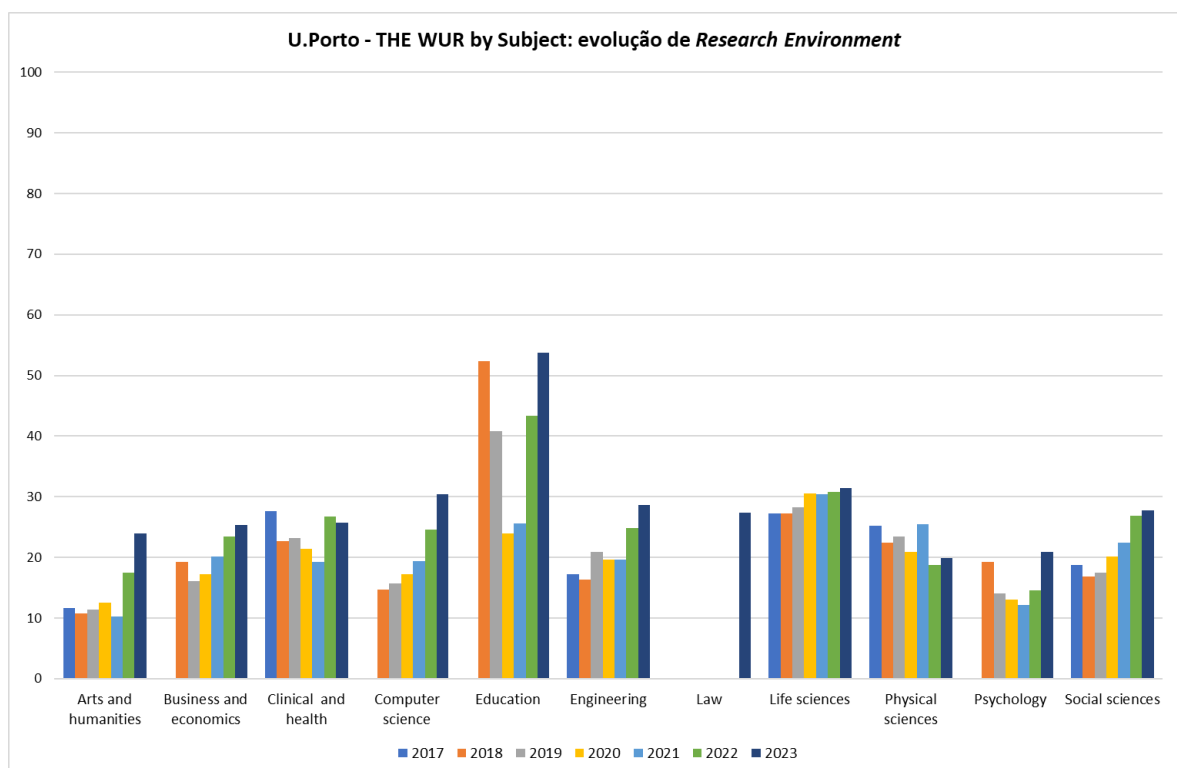
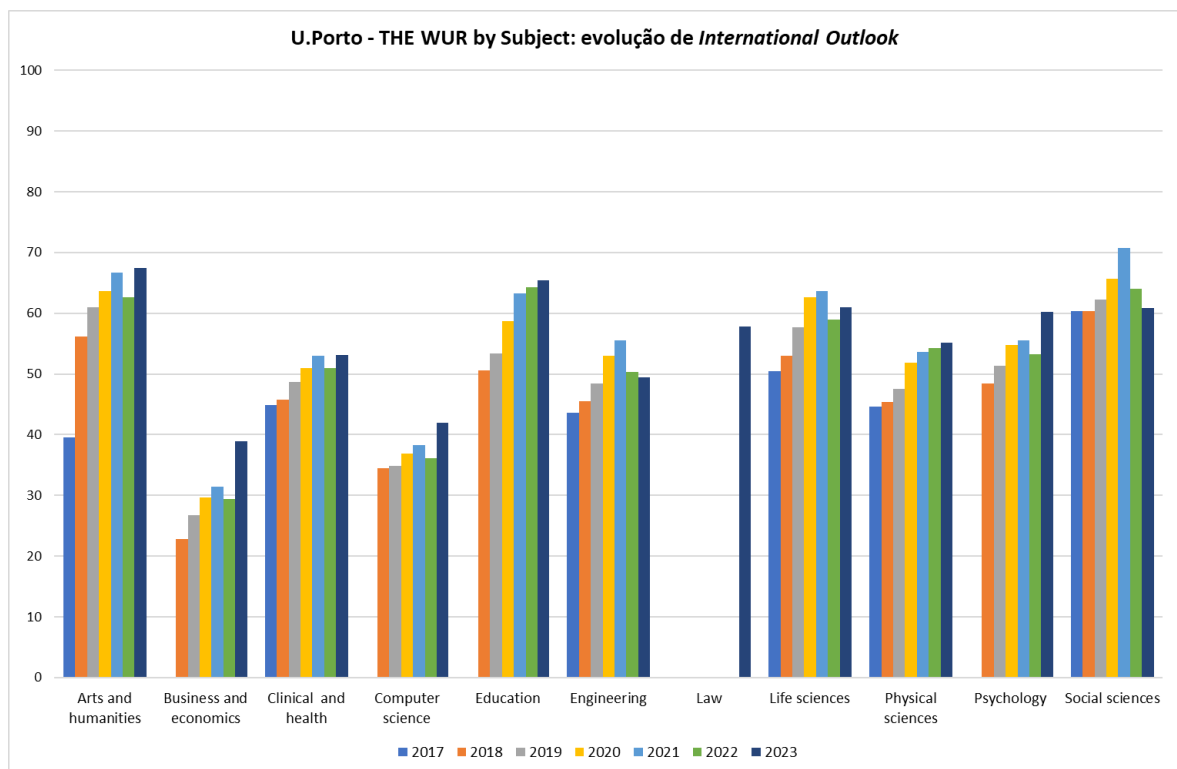
⁸Dados de 2017 a 2022 retirados de <https://www.timeshighereducation.com/world-university-rankings/by-subject> respetivamente entre 13 de setembro e 27 de novembro de 2017; entre 17 de outubro e 29 de novembro 2018; entre 2 de outubro e 19 de novembro de 2019; 28 de outubro de 2020; entre 16 de setembro e 3 de novembro de 2021; entre 25 e 26 de outubro de 2022; e em 26 de outubro de 2023.

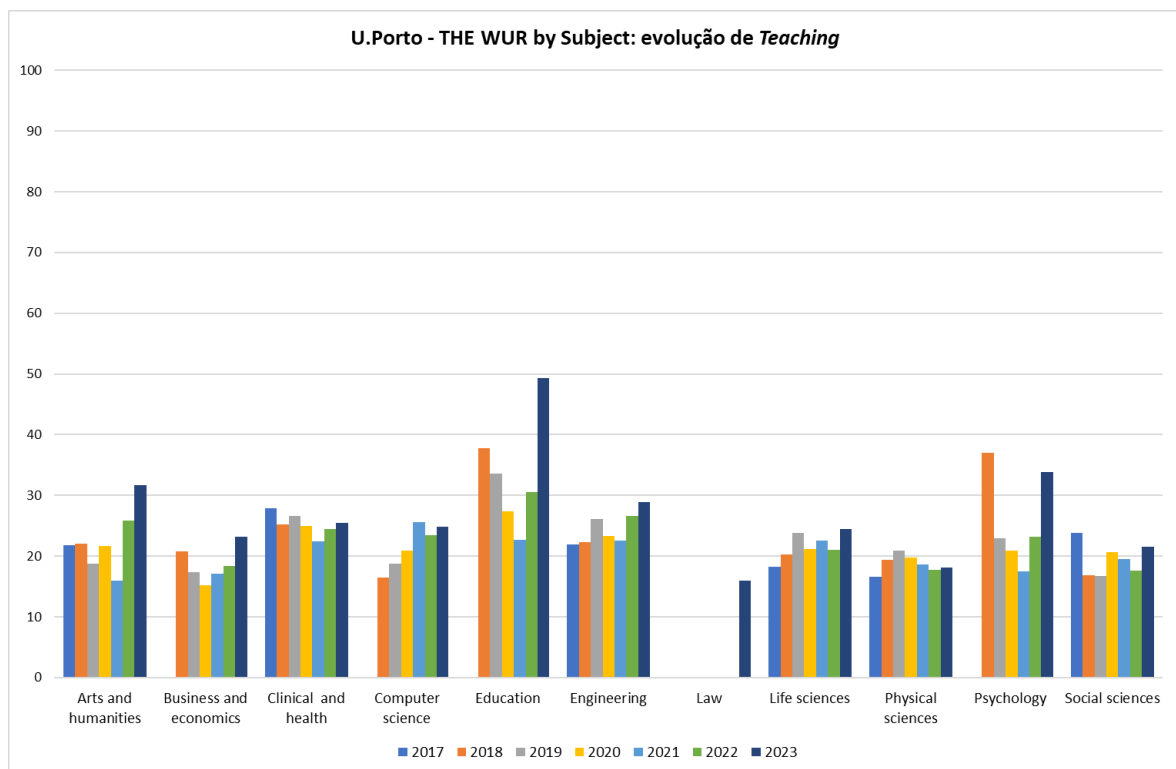
Evolução dos indicadores

		Arts & humanities	Business & economics	Clinical & health	Computer science	Education	Engineering	Law	Life sciences	Physical sciences	Psychology	Social sciences
Overall	2017	19,7-24,6	--	35,8-39,4	--	--	29,7-34,8	--	31,0-38,3	29,5-35,1	--	26,4-32,2
	2018	21,5-26,0	23,0-27,8	37,6-40,4	26,0-31,1	41,6-43,8	29,0-32,7	--	34,3-40,8	32,4-37,5	27,1-32,6	28,5-33,1
	2019	21,8-25,9	24,8-29,3	36,4-38,8	28,6-32,8	38,7-39,7	34,7-38,7	--	35,9-41,9	34,1-38,6	14,0-28,5	25,6-29,9
	2020	22,9-27,2	22,5-27,1	38,1-40,2	29,8-33,8	31,9-34,4	35,1-39,1	--	37,7-43,3	31,7-35,6	21,7-29,6	27,1-31,2
	2021	22,9-27,6	25,1-28,4	34,4-38,9	31,0-34,8	28,6-33,6	33,0-36,0	--	38,5-43,7	33,0-36,5	24,2-29,6	28,2-32,1
	2022	28,4-31,8	17,8-25,9	40,0-42,4	32,7-35,7	38,2-41,0	35,0-37,5		38,1-42,8	34,7-37,7	30,5-36,2	29,5-33,4
	2023	34,4-36,9	34,2-37,3	43,4-46,0	39,9-44,4	52,2-55,1	40,6-43,8	34,0-38,7	46,5-49,4	36,5-39,1	41,5-44,5	37,1-41,1
Research Quality (Citations)	2017	38		46,5			51,1		48,9	45,3		41,1
	2018	50,5	48,6	56,9	50,1	33,7	53,4		53,3	48,8	34,8	50,7
	2019	43,4	47,6	56,1	53,2	40,1	56,2		59,6	54	33,7	51,3
	2020	44,2	43	59,7	49,6	41,3	59,6		62,4	52,1	32,3	47,4
	2021	53	41	59,8	46,7	43,8	59,4		60,8	51,1	41	40,3
	2022	48,2	36	60,6	48	42,1	58		62	55,9	45	47,8
	2023	59,9	57,5	72,3	58,3	56,6	66,1	64	72,8	63,2	58,6	64,7
Industry (Industry Income)	2017	53,4		38,8			36,3		48,3	50,6		39,1
	2018	37,3	31,1	41,8	47,5	39,5	37,2		35,8	40,8	42,2	34,9
	2019	37	31,4	41,9	44	38,7	37,8		33,7	41,1	39,3	36
	2020	37,6	35,7	41,8	46,2	40,2	36,7		37,4	44	41	35,2
	2021	38	34,2	42,1	45,9	42,4	39,2		38,3	47,8	40,9	37,8
	2022	40,6	35,9	41,9	48,6	43,6	39,1		35,5	40,4	40,6	39,2
	2023	36,3	64	60,8	85,2	26	62,2	60,9	57,7	56,9	48,4	58,5
International Outlook	2017	39,6		44,9			43,6		50,5	44,6		60,4
	2018	56,2	22,8	45,7	34,5	50,6	45,5		53	45,4	48,4	60,4
	2019	61	26,8	48,7	34,8	53,4	48,4		57,7	47,6	51,3	62,2
	2020	63,6	29,6	50,9	36,9	58,7	53		62,6	51,9	54,8	65,7
	2021	66,7	31,4	53	38,3	63,2	55,5		63,6	53,6	55,5	70,7
	2022	62,6	29,4	51	36,1	64,3	50,3		58,9	54,2	53,3	64
	2023	67,4	38,9	53,1	42	65,4	49,5	57,8	61	55,1	60,2	60,9
Research Environment	2017	11,7		27,6			17,2		27,3	25,2		18,8
	2018	10,8	19,3	22,7	14,7	52,3	16,4		27,3	22,4	19,2	16,9
	2019	11,4	16,1	23,2	15,7	40,8	20,9		28,2	23,5	14,1	17,5
	2020	12,5	17,2	21,4	17,2	24	19,6		30,6	20,9	13,1	20,2
	2021	10,3	20,2	19,3	19,4	25,6	19,7		30,4	25,5	12,2	22,4
	2022	17,5	23,5	26,7	24,6	43,3	24,8		30,8	18,7	14,6	26,9
	2023	23,9	25,4	25,7	30,4	53,7	28,6	27,4	31,4	19,9	20,9	27,7
Teaching	2017	21,8		27,9			21,9		18,3	16,6		23,8
	2018	22	20,8	25,2	16,5	37,8	22,3		20,3	19,4	37	16,9
	2019	18,8	17,4	26,6	18,8	33,6	26,1		23,8	20,9	23	16,7
	2020	21,7	15,2	25	20,9	27,4	23,3		21,2	19,8	20,9	20,6
	2021	16	17,1	22,4	25,6	22,7	22,6		22,5	18,6	17,5	19,5
	2022	25,8	18,4	24,4	23,5	30,6	26,6		21	17,7	23,2	17,6
	2023	31,7	23,2	25,5	24,8	49,3	28,9	15,9	24,4	18,1	33,9	21,6

A alteração da metodologia em 2023 (THE WUR 3.0, em [anexo](#)) acarretou globalmente a melhoria de pontuação nos eixos em que a alteração foi mais significativa: *Research Quality* (anterior *Citations*) e *Industry* (anterior *Industry Income*).







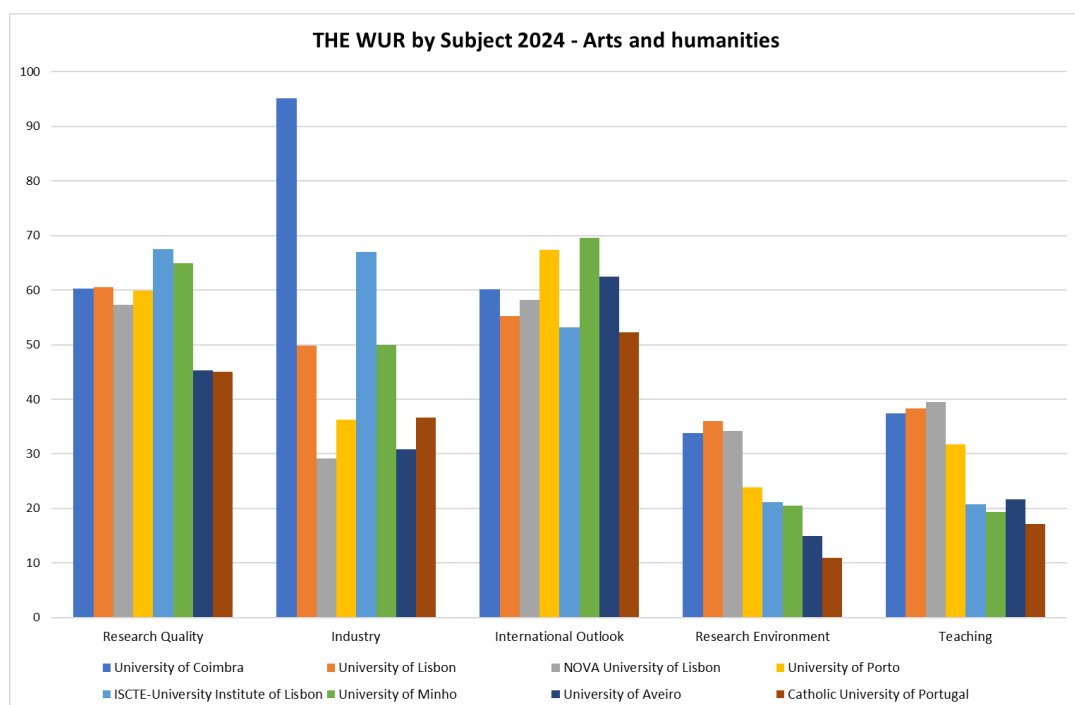
3.2 As Universidades portuguesas no THE WUR by subject 2024

3.2.1 Arts and humanities

	Mundo							Portugal						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
University of Coimbra	301-400	401+	301-400	301-400	251-300	251-300	151-175	3-5	5	3-6	3-6	1-2	3-5	1
University of Lisbon	251-300	301-400	251-300	251-300	301-400	201-250	176-200	1-2	2-4	2	1-2	3-6	1-2	2-3
NOVA University of Lisbon	251-300	201-250	201-250	251-300	251-300	201-250	176-200	1-2	1	1	1-2	1-2	1-2	2-3
University of Porto	301-400	301-400	301-400	301-400	301-400	251-300	251-300	3-5	2-4	3-6	3-6	3-6	3-5	4
ISCTE-University Institute of Lisbon	n/c	n/c	301-400	301-400	301-400	301-400	301-400			3-6	3-6	3-6	6	5-6
University of Minho	301-400	301-400	301-400	301-400	301-400	251-300	301-400	3-5	2-4	3-6	3-6	3-6	3-5	5-6
University of Aveiro	n/c	n/c	n/c	n/c	401-500	401-500	401-500					7	7	7
Catholic University of Portugal	n/c	n/c	n/c	n/c	n/c	501-600	501-600						8	8
Nº de IES	401	506	536	565	606	663	691	5	5	6	6	7	8	8

n/c- não consta

	Overall	Research Quality	Industry	International Outlook	Research Environment	Teaching
University of Coimbra	42,5–44,7	60,3	95,2	60,2	33,8	37,4
University of Lisbon	40,5–42,4	60,5	49,8	55,2	36	38,3
NOVA University of Lisbon	40,5–42,4	57,3	29,2	58,2	34,2	39,5
University of Porto	34,4–36,9	59,9	36,3	67,4	23,9	31,7
ISCTE-University Institute of Lisbon	29,4–34,3	67,5	67	53,2	21,1	20,8
University of Minho	29,4–34,3	64,9	50	69,6	20,5	19,3
University of Aveiro	25,7–29,3	45,3	30,8	62,5	14,9	21,7
Catholic University of Portugal	21,8–25,6	45	36,6	52,3	10,9	17,1

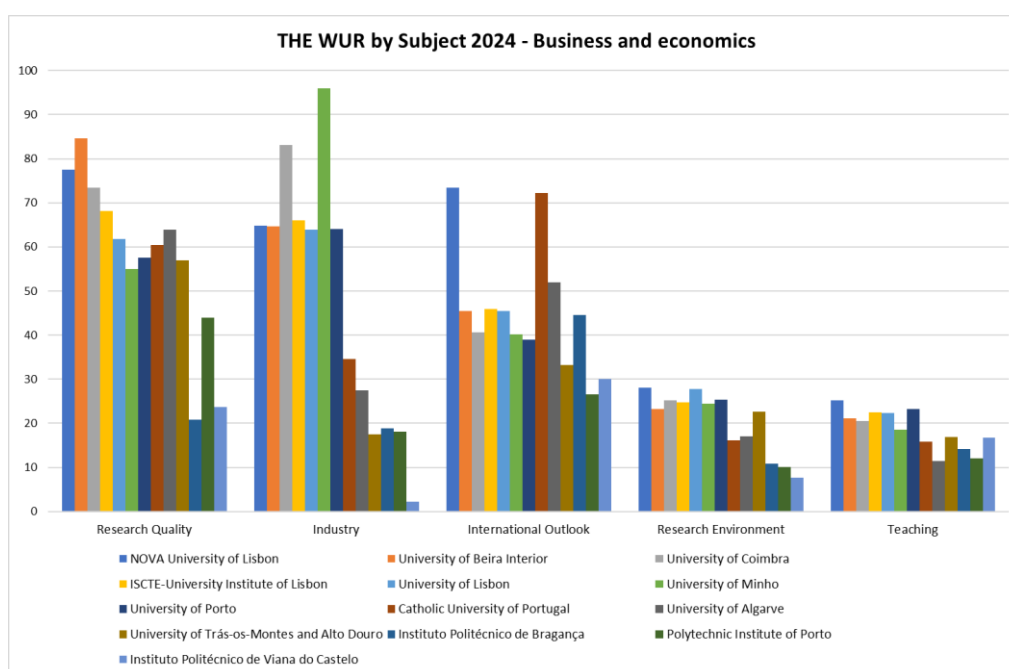


3.2.2 Business and economics

	Mundo							Portugal						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
NOVA UL	151-175	176-200	151-175	151-175	176-200	201-250	201-250	1	1	1	1	1	1	1
UBI	n/c	301-400	401-500	301-400	301-400	301-400	301-400		3	4-9	2-6	2-4	2-4	2-5
U.Coimbra	n/c	401-500	401-500	301-400	401-500	401-500	301-400		4-7	4-9	2-6	5-6	5-6	2-5
ISCTE-IUL	n/c	401-500	401-500	301-400	301-400	301-400	301-400		4-7	4-9	2-6	2-4	2-4	2-5
U.Lisbon	n/c	251-300	301-400	301-400	401-500	401-500	301-400		2	2-3	2-6	5-6	5-6	2-5
U.Minho	n/c	401-500	401-500	401-500	501-600	501-600	401-500		4-7	4-9	7	7-9	7	6-7
U.Porto	n/c	401-500	401-500	501-600	501-600	601-800	401-500		4-7	4-9	8-9	7-9	9-10	6-7
UCP	n/c	n/c	301-400	301-400	301-400	301-400	501-600			2-3	2-6	2-4	2-4	8
U.Algarve	n/c	n/c	401-500	501-600	501-600	601-800	601-800			4-9	8-9	7-9	9-10	9-10
UTAD	n/c	n/c	n/c	n/c	601+	601-800	601-800					10+	9-10	9-10
IP Bragança	n/c	n/c	n/c	n/c	n/c	n/c	801+							11+
IP Porto	n/c	n/c	n/c	601+	601+	801+	801+				10	10+	11	11+
IPVianaCastelo	n/c	n/c	n/c	n/c	n/c	n/c	801+							11+
Nº de IES	200	585	632	729	795	870	909	1	7	9	10	11	11	13

n/c- não consta

	Overall	Research Quality	Industry	International Outlook	Research Environment	Teaching
NOVA University of Lisbon	44,3–46,1	77,6	64,8	73,5	28,1	25,2
University of Beira Interior	37,4–41,6	84,6	64,6	45,4	23,3	21,1
University of Coimbra	37,4–41,6	73,5	83,1	40,6	25,2	20,5
ISCTE-University Institute of Lisbon	37,4–41,6	68,2	66,1	46	24,8	22,5
University of Lisbon	37,4–41,6	61,8	63,9	45,5	27,8	22,3
University of Minho	34,2–37,3	55	95,9	40,2	24,5	18,6
University of Porto	34,2–37,3	57,5	64	38,9	25,4	23,2
Catholic University of Portugal	31,3–34,1	60,5	34,6	72,3	16,1	15,8
University of Algarve	23,0–31,2	63,9	27,5	52	17	11,4
Univ. of Trás-os-Montes and Alto Douro	23,0–31,2	56,9	17,5	33,2	22,6	16,9
Instituto Politécnico de Bragança	12,6–22,9	20,9	18,8	44,5	10,9	14,2
Polytechnic Institute of Porto	12,6–22,9	43,9	18,1	26,6	10,1	12,1
Inst. Politécnico de Viana do Castelo	12,6–22,9	23,7	2,2	30,1	7,7	16,8

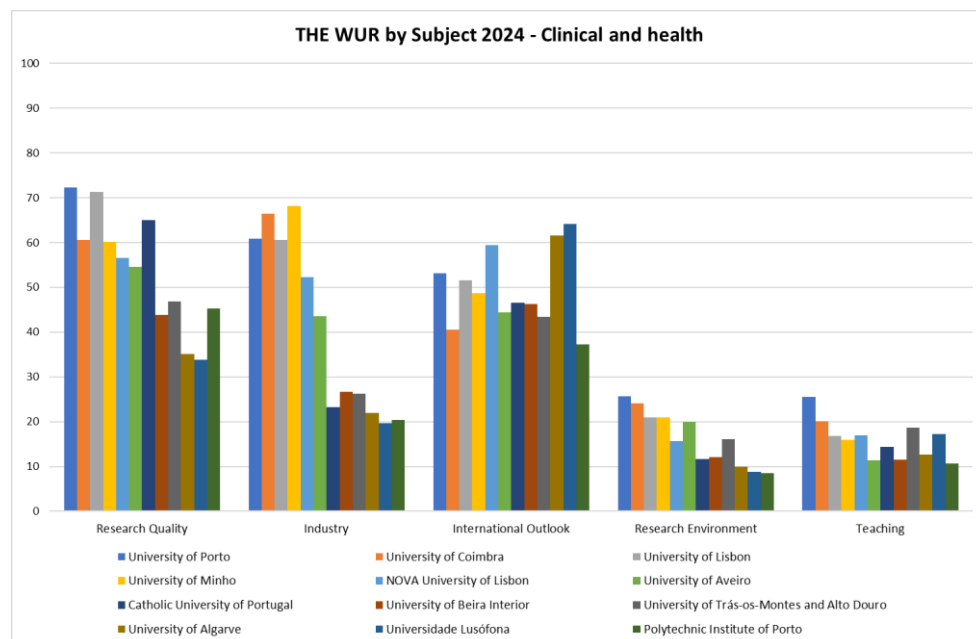


3.2.3 Clinical and health

	Mundo							Portugal						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
U.Porto	251-300	251-300	251-300	251-300	301-400	251-300	251-300	1	1	1	3	3-4	2	1
U.Coimbra	301-400	401-500	401-500	501-600	501-600	501-600	301-400	2-3	2-5	3-4	5-6	5-6	4-6	2-3
U.Lisbon	401-500	401-500	301-400	301-400	301-400	401-500	301-400	4-7	2-5	2	4	3-4	3	2-3
U.Minho	301-400	401-500	401-500	501-600	501-600	501-600	401-500	2-3	2-5	3-4	5-6	5-6	4-6	4-5
NOVA UL	401-500	401-500	501-600	201-250	251-300	501-600	401-500	4-7	2-5	5-6	2	2	4-6	4-5
U.Aveiro	n/c	n/c	n/c	n/c	601+	601-800	501-600					7-10	7-11	6-7
UCP	n/c	n/c	n/c	151-175	151-175	151-175	501-600				1	1	1	6-7
UBI	401-500	501-600	601+	601+	601+	601-800	601-800	4-7	6-8	7-8	7-9	7-10	7-11	8-9
UTAD	n/c	501-600	601+	601+	601+	601-800	601-800		6-8	7-8	7-9	7-10	7-11	8-9
U.Algarve	401-500	501-600	501-600	601+	601+	601-800	801-1000	4-7	6-8	5-6	7-9	7-10	7-11	10-12
U.Lusófona	n/c	n/c	n/c	n/c	n/c	601-800	801-1000						7-11	10-12
IP Porto	n/c	n/c	n/c	n/c	n/c	801+	801-1000						12	10-12
Nº de IES	501	721	775	856	925	1001	1059	7	8	8	9	10	12	12

n/c- não consta

	Overall	Research Quality	Industry	International Outlook	Research Environment	Teaching
University of Porto	43,4–46,0	72,3	60,8	53,1	25,7	25,5
University of Coimbra	38,7–43,3	60,5	66,5	40,5	24,1	20,1
University of Lisbon	38,7–43,3	71,3	60,5	51,5	21	16,8
University of Minho	34,4–38,5	60,1	68,1	48,7	20,9	15,9
NOVA Univ of Lisbon	34,4–38,5	56,6	52,3	59,4	15,6	16,9
University of Aveiro	31,4–34,3	54,5	43,6	44,4	19,9	11,3
Catholic Univ. of Portugal	31,4–34,3	65	23,2	46,5	11,7	14,3
University of Beira Interior	25,2–31,3	43,9	26,6	46,2	12,1	11,5
University of Trás-os-Montes and Alto Douro	25,2–31,3	46,8	26,2	43,4	16,1	18,6
University of Algarve	17,0–25,1	35,1	22	61,6	10	12,7
Universidade Lusófona	17,0–25,1	33,8	19,6	64,2	8,8	17,2
Polytechnic Inst of Porto	17,0–25,1	45,2	20,4	37,3	8,5	10,6

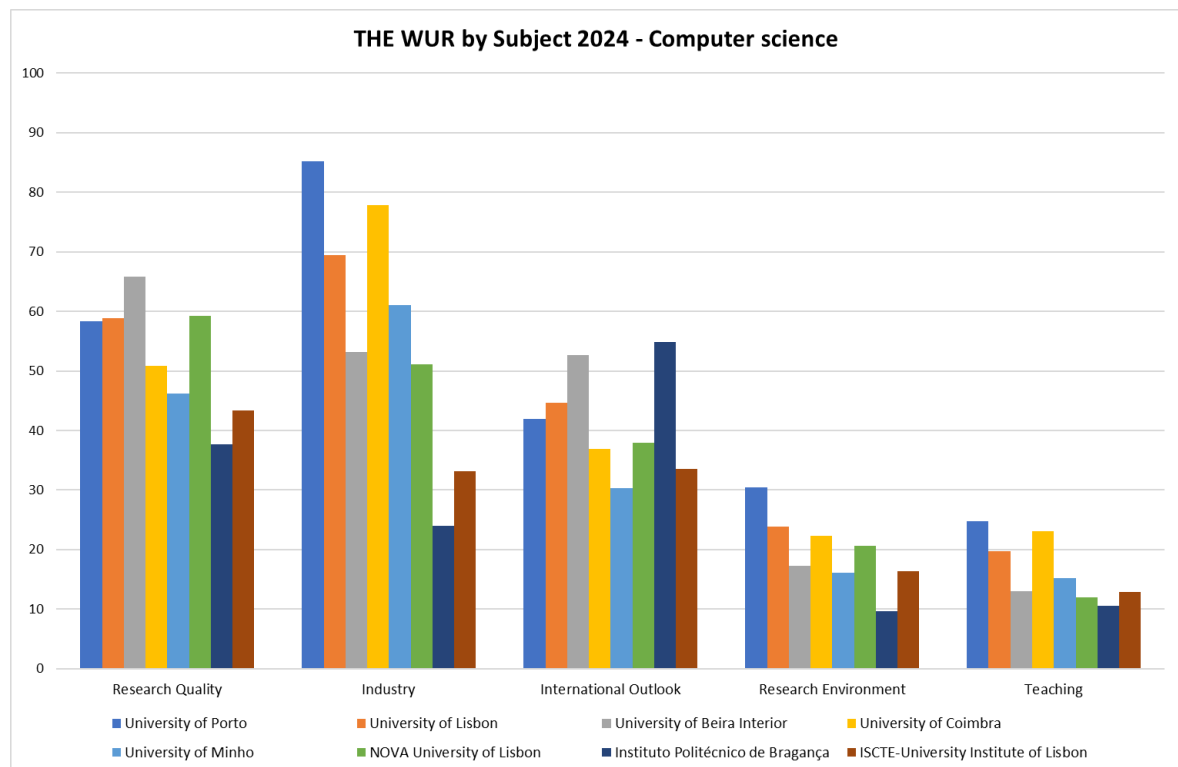


3.2.4 Computer science

	Mundo							Portugal						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
U.Porto	n/c	401-500	401-500	401-500	401-500	401-500	301-400		3-4	2-4	2-4	1-2	1-2	1
U.Lisbon	n/c	401-500	401-500	401-500	501-600	501-600	401-500		3-4	2-4	2-4	3-4	3	2
UBI	201-250	251-300	301-400	301-400	401-500	401-500	501-600	1	1	1	1	1-2	1-2	3-4
U.Coimbra	251-300	301-400	401-500	401-500	501-600	601-800	501-600	2	2	2-4	2-4	3-4	4-6	3-4
U.Minho	n/c	501-600	601+	601-800	601-800	801+	601-800		5-6	5-6	6	5-6	7	5-6
NOVA UL	n/c	n/c	n/c	n/c	n/c	n/c	601-800							5-6
IP Bragança	n/c	n/c	n/c	n/c	n/c	601-800	801-1000						4-6	7-8
ISCTE-IUL	n/c	501-600	601+	501-600	601-800	601-800	801-1000		5-6	5-6	5	5-6	4-6	7-8
Nº de IES	302	684	749	827	891	974	1027	2	6	6	6	6	7	8

n/c- não consta

	Overall	Research Quality	Industry	International Outlook	Research Environment	Teaching
University of Porto	39,9–44,4	58,3	85,2	42	30,4	24,8
University of Lisbon	36,1–39,8	58,8	69,5	44,6	23,8	19,7
University of Beira Interior	33,3–36,0	65,8	53,2	52,6	17,3	13
University of Coimbra	33,3–36,0	50,9	77,8	36,9	22,3	23,1
University of Minho	26,0–33,2	46,2	61,1	30,3	16,1	15,2
NOVA Univ of Lisbon	26,0–33,2	59,2	51,1	37,9	20,6	12
Inst Politéc Bragança	16,9–25,9	37,7	24	54,9	9,7	10,6
ISCTE-Univ.Inst. of Lisbon	16,9–25,9	43,4	33,1	33,6	16,4	12,9



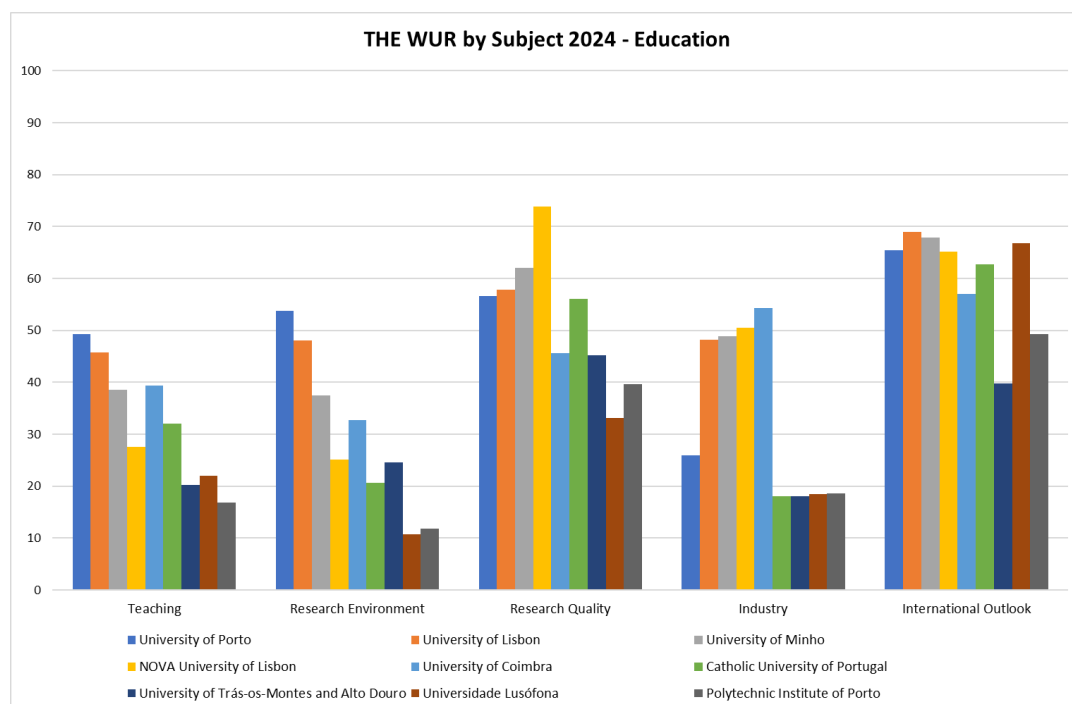
3.2.5 Education

Em 2017, não constava nenhuma Universidade portuguesa no top 100.

	Mundo						Portugal					
	2018	2019	2020	2021	2022	2023	2018	2019	2020	2021	2022	2023
U.Porto	126-150	176-200	251-300	301-400	201-250	101-125	1	2-3	4	3-4	2-3	1
U.Lisbon	176-200	151-175	126-150	151-175	176-200	126-150	2	1	1	1	1	2
U.Minho	201-250	201-250	301-400	301-400	201-250	151-175	3-4	4-5	5-6	3-4	2-3	3
NOVA UL	301-400	251-300	176-200	n/c	n/c	201-250	5	6	2			4
U.Coimbra	201-250	176-200	201-250	401-500	301-400	251-300	3-4	2-3	3	5-6	4	5
UCP	n/c	n/c	n/c	n/c	n/c	301-400						6
UTAD	n/c	n/c	401-500	401-500	601+	401-500			7	5-6	6	7
U.Lusófona	n/c	n/c	n/c	n/c	n/c	501-600						8
IP Porto	n/c	201-250	301-400	251-300	501-600	601+		4-5	5-6	2	5	9
Nº de IES	428	477	537	597	655	703	5	6	7	6	6	9

n/c- não consta

	Overall	Teaching	Research Environment	Research Quality	Industry	International Outlook
University of Porto	52,2–55,1	49,3	53,7	56,6	26	65,4
University of Lisbon	49,3–52,1	45,7	48	57,8	48,2	68,9
University of Minho	47,2–49,0	38,5	37,5	62,1	48,9	67,9
NOVA University of Lisbon	42,0–45,0	27,6	25,1	73,8	50,5	65,1
University of Coimbra	38,9–41,9	39,4	32,7	45,6	54,3	57
Catholic Univ. of Portugal	34,6–38,8	32	20,6	56,1	18	62,7
University of Trás-os-Montes and Alto Douro	29,8–34,5	20,3	24,6	45,2	18	39,8
Universidade Lusófona	24,8–29,7	22	10,8	33,1	18,5	66,8
Polyt. Institute of Porto	13,5–24,7	16,8	11,8	39,6	18,6	49,3

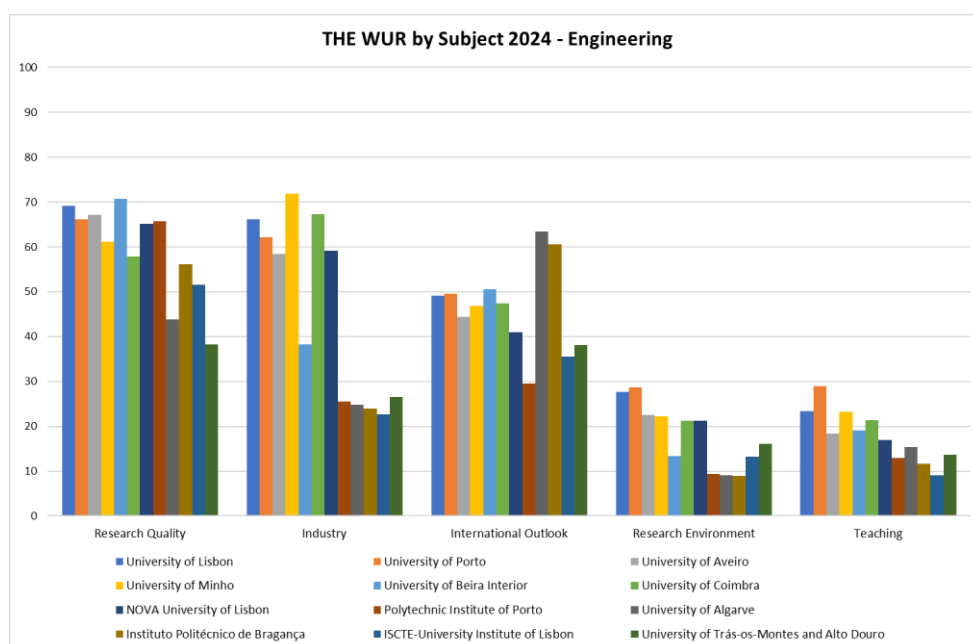


3.2.6 Engineering

	Mundo							Portugal						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
U.Lisbon	301-400	301-400	401-500	401-500	301-400	401-500	301-400	2-6	1-2	3-5	3-4	1	1-2	1-2
U.Porto	301-400	401-500	301-400	301-400	401-500	401-500	301-400	2-6	3-7	1-2	1-2	2-4	1-2	1-2
U.Aveiro	301-400	401-500	401-500	401-500	501-600	601-800	401-500	2-6	3-7	3-5	3-4	5-8	5-11	3-4
U.Minho	301-400	401-500	401-500	501-600	401-500	501-600	401-500	2-6	3-7	3-5	5-7	2-4	3-4	3-4
UBI	251-300	301-400	301-400	301-400	401-500	501-600	501-600	1	1-2	1-2	1-2	2-4	3-4	5-7
U.Coimbra	301-400	401-500	501-600	501-600	501-600	601-800	501-600	2-6	3-7	6-8	5-7	5-8	5-11	5-7
NOVA UL	401-500	501-600	501-600	501-600	601-800	601-800	501-600	7	8	6-8	5-7	9-11	5-11	5-7
IP Porto	n/c	401-500	501-600	601-800	501-600	601-800	601-800		3-7	6-8	8-9	5-8	5-11	8
U.Algarve	n/c	n/c	n/c	n/c	601-800	601-800	801-1000					9-11	5-11	9-12
IP Bragança	n/c	n/c	n/c	n/c	n/c	601-800	801-1000						5-11	9-12
ISCTE-IUL	n/c	n/c	n/c	n/c	501-600	601-800	801-1000					5-8	5-11	9-12
UTAD	n/c	601-800	601-800	601-800	601-800	801-1000	801-1000		9	9	8-9	9-11	12	9-12
Nº de IES	501	903	1008	1098	1188	1306	1374	7	9	9	9	11	12	12

n/c- não consta

	Overall	Research Quality	Industry	International Outlook	Research Environment	Teaching
University of Lisbon	40,6–43,8	69,2	66,2	49,1	27,7	23,4
University of Porto	40,6–43,8	66,1	62,2	49,5	28,6	28,9
University of Aveiro	37,1–40,5	67,1	58,4	44,4	22,5	18,3
University of Minho	37,1–40,5	61,2	71,9	46,8	22,2	23,3
Univ. of Beira Interior	34,6–37,0	70,7	38,2	50,5	13,3	19,1
University of Coimbra	34,6–37,0	57,9	67,3	47,4	21,3	21,4
NOVA Univ. of Lisbon	34,6–37,0	65,2	59,1	40,9	21,2	16,9
Polytechnic Inst. of Porto	28,5–34,5	65,7	25,5	29,5	9,4	12,9
University of Algarve	23,6–28,4	43,9	24,8	63,4	9,1	15,4
Inst. Politéc. de Bragança	23,6–28,4	56,1	23,9	60,5	8,9	11,7
ISCTE-Univ. Inst. Lisbon	23,6–28,4	51,6	22,7	35,5	13,2	9
Univ.of Trás-os-Montes and Alto Douro	23,6–28,4	38,3	26,5	38,1	16,1	13,6



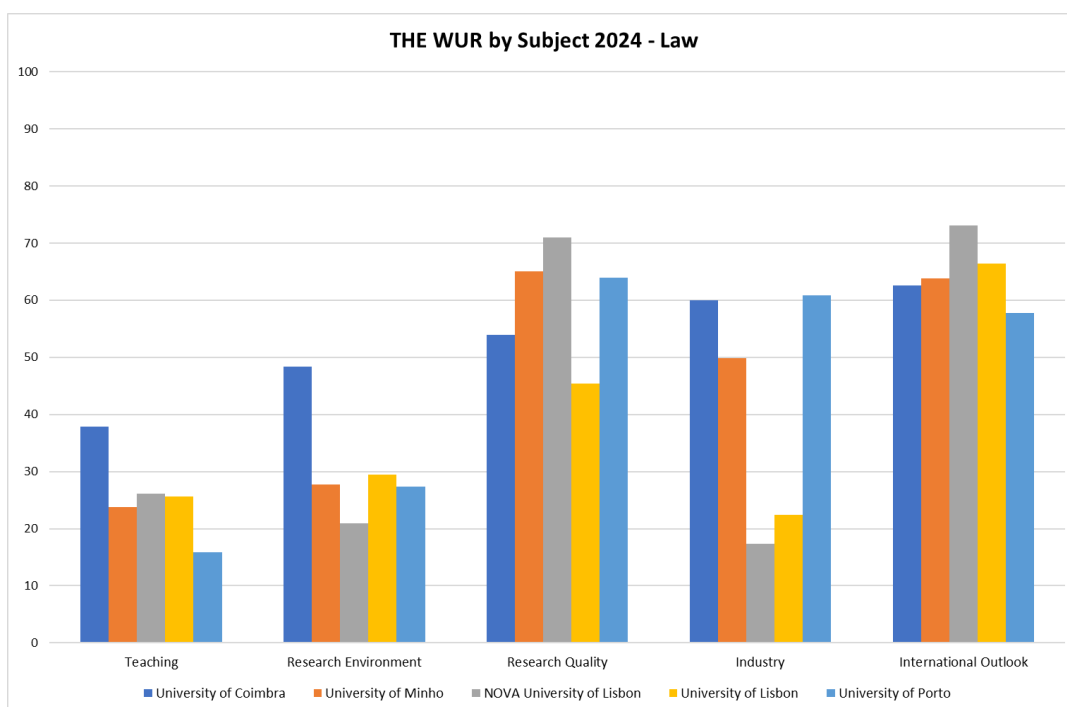
3.2.7 Law

Em 2017, não constava nenhuma Universidade portuguesa no top 100.

	Mundo						Portugal					
	2018	2019	2020	2021	2022	2023	2018	2019	2020	2021	2022	2023
University of Coimbra	151+	151+	176-200	176-200	176-200	101-125	1	2	2	1-2	2	1
University of Minho	n/c	n/c	n/c	201+	151-175	176-200				3	1	2-3
NOVA Univof Lisbon	n/c	n/c	n/c	n/c	201-250	176-200					3-4	2-3
University of Lisbon	n/c	126-150	126-150	176-200	201-250	201-250		1	1	1-2	3-4	4-5
University of Porto	n/c	n/c	n/c	n/c	n/c	201-250						4-5
Nº de IES	187	190	224	257	290	329	1	2	2	3	4	5

n/c- não consta

	Overall	Teaching	Research Environment	Research Quality	Industry	International Outlook
University of Coimbra	46,5–48,7	37,9	48,4	53,9	60	62,6
University of Minho	38,9–40,8	23,8	27,7	65,1	49,9	63,8
NOVA University of Lisbon	38,9–40,8	26,1	20,9	71	17,4	73,1
University of Lisbon	34,0–38,7	25,6	29,5	45,4	22,4	66,4
University of Porto	34,0–38,7	15,9	27,4	64	60,9	57,8

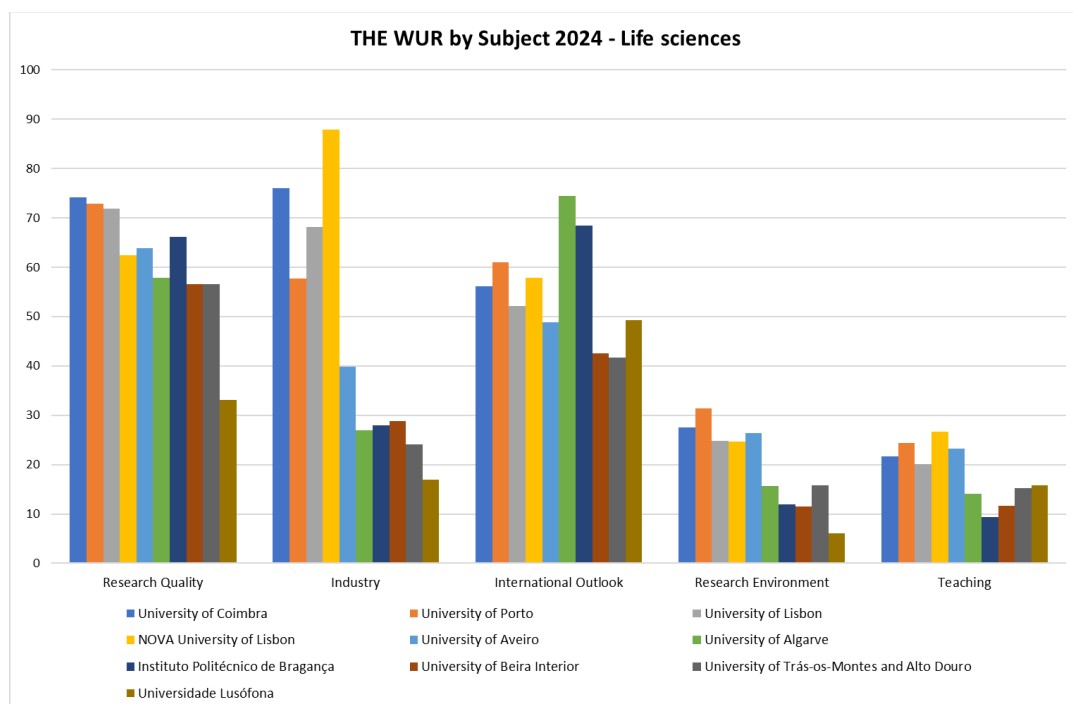


3.2.8 Life sciences

	Mundo							Portugal						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
U.Coimbra	251-300	301-400	301-400	301-400	301-400	301-400	251-300	1	1-4	1-3	1-3	1-3	1-2	1-2
U.Porto	301-400	301-400	301-400	301-400	301-400	301-400	251-300	2-4	1-4	1-3	1-3	1-3	1-2	1-2
U.Lisbon	301-400	301-400	301-400	301-400	301-400	401-500	301-400	2-4	1-4	1-3	1-3	1-3	3-5	3-4
NOVA UL	n/c	n/c	n/c	n/c	n/c	n/c	301-400							3-4
U.Aveiro	301-400	301-400	401-500	401-500	401-500	401-500	401-500	2-4	1-4	4-6	4	4	3-5	5
U.Algarve	401-500	401-500	401-500	501-600	501-600	501-600	501-600	5	5-6	4-6	5-7	5	6	6-7
IP Bragança	n/c	n/c	n/c	n/c	n/c	401-500	501-600						3-5	6-7
UBI	n/c	601+	601+	501-600	601-800	601-800	601-800		8	8	5-7	6-7	7-8	8-9
UTAD	n/c	501-600	501-600	501-600	601-800	601-800	601-800		7	7	5-7	6-7	7-8	8-9
U.Lusófona	n/c	n/c	n/c	n/c	n/c	n/c	801-1000							10
U.Évora	n/c	401-500	401-500	n/c	n/c	n/c	n/c		5-6	4-6				
Nº de IES	502	751	821	895	972	1017	1059	5	8	8	7	7	8	10

n/c- não consta

	Overall	Research Quality	Industry	International Outlook	Research Environment	Teaching
University of Coimbra	46,5–49,4	74,2	76	56,1	27,5	21,7
University of Porto	46,5–49,4	72,8	57,7	61	31,4	24,4
University of Lisbon	41,7–46,4	71,9	68,1	52,1	24,8	20,1
NOVA University of Lisbon	41,7–46,4	62,5	87,9	57,9	24,6	26,6
University of Aveiro	37,5–41,6	63,8	39,8	48,9	26,4	23,2
University of Algarve	33,8–37,4	57,8	27	74,5	15,6	14,1
Inst. Politécnico de Bragança	33,8–37,4	66,2	28	68,5	11,9	9,3
University of Beira Interior	25,9–33,7	56,6	28,8	42,5	11,5	11,7
Univ. Trás-os-Montes Alto Douro	25,9–33,7	56,6	24,1	41,7	15,8	15,2
Universidade Lusófona	17,4–25,8	33,1	16,9	49,3	6	15,8

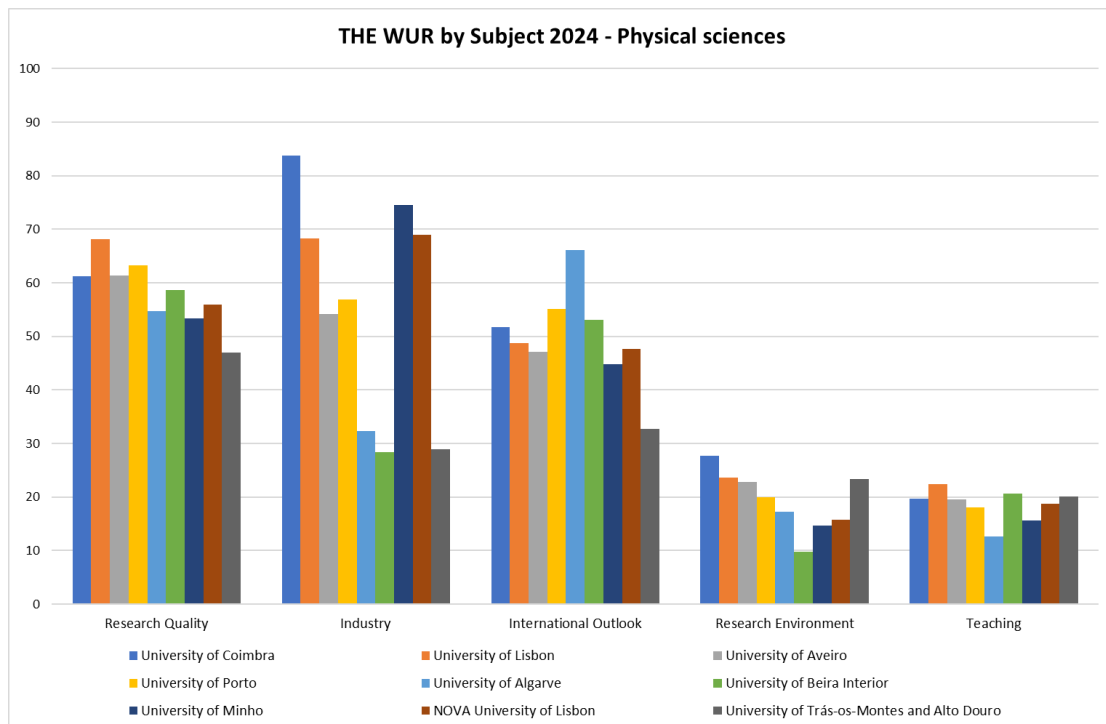


3.2.9 Physical sciences

	Mundo							Portugal						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
U.Coimbra	401-500	401-500	501-600	501-600	501-600	501-600	401-500	1-5	1-4	3-5	1-6	1-6	1-4	1-2
U.Lisbon	401-500	401-500	401-500	501-600	501-600	501-600	401-500	1-5	1-4	1-2	1-6	1-6	1-4	1-2
U.Aveiro	401-500	401-500	501-600	501-600	501-600	501-600	501-600	1-5	1-4	3-5	1-6	1-6	1-4	3-4
U.Porto	401-500	401-500	401-500	501-600	501-600	501-600	501-600	1-5	1-4	1-2	1-6	1-6	1-4	3-4
U.Algarve	n/c	n/c	n/c	501-600	501-600	601-800	601-800				1-6	1-6	5-8	5-9
UBI	n/c	601-800	601-800	601-800	601-800	601-800	601-800		7-9	6-9	7-9	7-8	5-8	5-9
U.Minho	n/c	601-800	601-800	601-800	801-1000	801-1000	601-800		7-9	6-9	7-9	9	9	5-9
NOVA UL	401-500	501-600	501-600	501-600	601-800	601-800	601-800	1-5	5-6	3-5	1-6	7-8	5-8	5-9
UTAD	n/c	501-600	601-800	601-800	501-600	601-800	601-800		5-6	6-9	7-9	1-6	5-8	5-9
U.Évora	n/c	601-800	601-800	n/c	n/c	n/c	n/c		7-9	6-9				
Nº de IES	501	963	1054	1149	1227	1307	1370	5	9	9	9	9	9	9

n/c- não consta

	Overall	Research Quality	Industry	International Outlook	Research Environment	Teaching
University of Coimbra	39,2–42,6	61,2	83,7	51,7	27,7	19,7
University of Lisbon	39,2–42,6	68,1	68,3	48,7	23,6	22,4
University of Aveiro	36,5–39,1	61,4	54,2	47,1	22,8	19,6
University of Porto	36,5–39,1	63,2	56,9	55,1	19,9	18,1
University of Algarve	30,7–36,4	54,7	32,3	66,1	17,3	12,7
Univ.y of Beira Interior	30,7–36,4	58,7	28,4	53,1	9,8	20,7
University of Minho	30,7–36,4	53,3	74,5	44,8	14,7	15,6
NOVA Univof Lisbon	30,7–36,4	55,9	69	47,6	15,8	18,8
Univ of Trás-os-Montes and Alto Douro	30,7–36,4	47	28,9	32,7	23,3	20,1



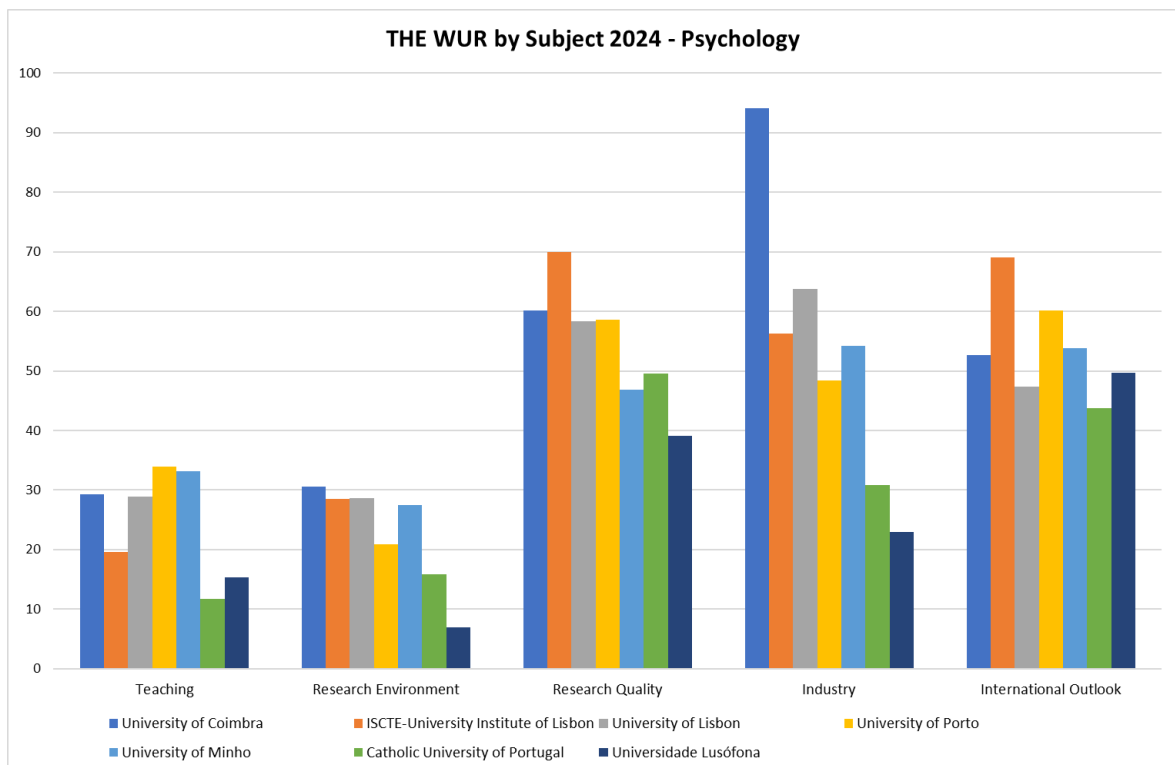
3.2.10 Psychology

Em 2017, não constava nenhuma Universidade portuguesa no top 100.

	Mundo						Portugal					
	2018	2019	2020	2021	2022	2023	2018	2019	2020	2021	2022	2023
University of Coimbra	251-300	301-400	251-300	401-500	301-400	201-250	1-4	2-3	2	3-5	2-4	1-2
ISCTE-University Institute of Lisbon	251-300	201-250	201-250	176-200	201-250	201-250	1-4	1	1	1	1	1-2
University of Lisbon	251-300	401+	301-400	301-400	401-500	251-300	1-4	4-5	3-4	2	5-6	3-4
University of Porto	301-400	401+	401-500	401-500	301-400	251-300	5	4-5	5-6	3-5	2-4	3-4
University of Minho	251-300	301-400	301-400	401-500	301-400	301-400	1-4	2-3	3-4	3-5	2-4	5
Catholic University of Portugal	n/c	n/c	401-500	501+	501+	501-600			5-6	6	7	6-7
Universidade Lusófona	n/c	n/c	n/c	n/c	401-500	501-600					5-6	6-7
Nº de IES	463	494	533	568	600	621	5	5	6	6	7	7

n/c- não consta

Name	Overall	Teaching	Research Environment	Research Quality	Industry	International Outlook
University of Coimbra	44,7–47,3	29,3	30,6	60,1	94,1	52,7
ISCTE-University Institute of Lisbon	44,7–47,3	19,6	28,5	70	56,3	69,1
University of Lisbon	41,5–44,5	28,9	28,7	58,3	63,7	47,3
University of Porto	41,5–44,5	33,9	20,9	58,6	48,4	60,2
University of Minho	36,3–41,4	33,2	27,5	46,8	54,2	53,8
Catholic University of Portugal	22,9–30,6	11,7	15,8	49,5	30,8	43,8
Universidade Lusófona	22,9–30,6	15,3	6,9	39,1	23	49,7

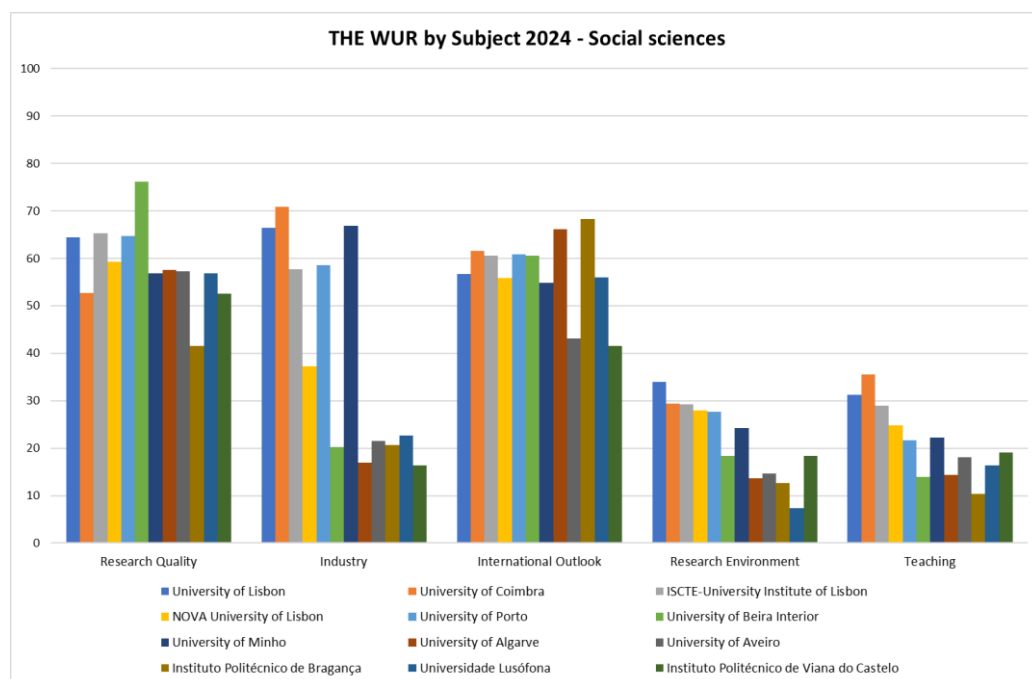


3.2.11 Social sciences

	Mundo							Portugal						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
U.Lisbon	201-250	201-250	301-400	301-400	301-400	301-400	201-250	1	1	1-4	2-4	1	1-2	1
U.Coimbra	251-300	301-400	301-400	251-300	401-500	401-500	251-300	2	2-5	1-4	1	2-8	3-7	2-3
ISCTE-IUL	n/c	401-500	401-500	401-500	401-500	401-500	251-300		6	5-7	5-9	2-8	3-7	2-3
NOVA UL	301-400	301-400	301-400	301-400	401-500	301-400	301-400	3-5	2-5	1-4	2-4	2-8	1-2	4-5
U.Porto	301-400	301-400	401-500	401-500	401-500	401-500	301-400	3-5	2-5	5-7	5-9	2-8	3-7	4-5
UBI	n/c	501-600	501-600	401-500	501-600	401-500	401-500		7-8	8-9	5-9	9	3-7	6-7
U.Minho	n/c	501-600	501-600	401-500	401-500	401-500	401-500		7-8	8-9	5-9	2-8	3-7	6-7
U.Algarve	n/c	n/c	301-400	301-400	401-500	501-600	601-800			1-4	2-4	2-8	8	8-12
U.Aveiro	301-400	301-400	401-500	401-500	401-500	601-800	601-800	3-5	2-5	5-7	5-9	2-8	9	8-12
IP Bragança	n/c	n/c	n/c	n/c	n/c	n/c	601-800							8-12
U.Lusófona	n/c	n/c	n/c	n/c	n/c	n/c	601-800							8-12
IPViana Castelo	n/c	n/c	n/c	n/c	n/c	n/c	601-800							8-12
Nº de IES	400	666	720	791	870	941	997	5	8	9	9	9	9	12

n/c- não consta

	Overall	Research Quality	Industry	International Outlook	Research Environment	Teaching
U.Lisbon	43,4–47,7	64,5	66,4	56,7	34	31,2
U.Coimbra	41,2–43,3	52,7	70,9	61,5	29,4	35,6
ISCTE-IUL	41,2–43,3	65,3	57,7	60,6	29,3	29
NOVA UL	37,1–41,1	59,3	37,3	55,9	28	24,8
U.Porto	37,1–41,1	64,7	58,5	60,9	27,7	21,6
UBI	32,9–37,0	76,1	20,2	60,6	18,3	14
U.Minho	32,9–37,0	56,8	66,9	54,8	24,2	22,2
U.Algarve	23,4–29,7	57,5	17	66,2	13,6	14,4
U.Aveiro	23,4–29,7	57,3	21,5	43,1	14,7	18,1
IP Bragança	23,4–29,7	41,6	20,7	68,3	12,6	10,4
U.Lusófona	23,4–29,7	56,9	22,7	56	7,3	16,4
IPViana do Castelo	23,4–29,7	52,6	16,3	41,5	18,4	19,1



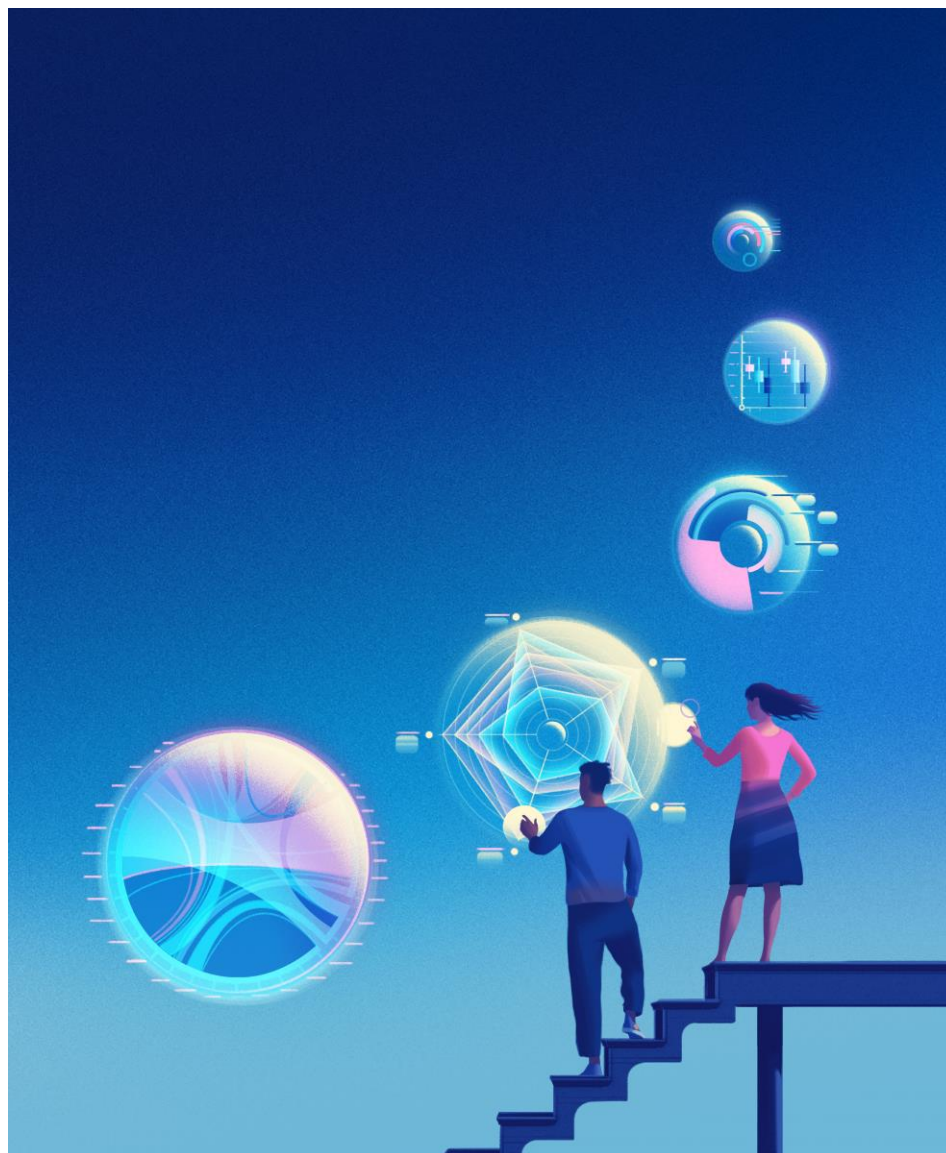
Anexo - Metodologia do THE WUR 2024



World University Rankings

**METHODOLOGY FOR OVERALL AND SUBJECT RANKINGS FOR THE
TIMES HIGHER EDUCATION WORLD UNIVERSITY RANKINGS 2024**

September 2023



Times Higher Education World University Rankings:

Times Higher Education is the data provider underpinning university excellence in every continent across the world. As the company behind the world's most influential university ranking, and with over five decades of experience as a source of analysis and insight on higher education, we have unparalleled expertise on the trends underpinning university performance globally. Our data and benchmarking tools are used by many of the world's most prestigious universities to help them achieve their strategic goals.

The annual *Times Higher Education (THE)* World University Rankings (WUR), started in 2004, aims to provide the definitive list of the best universities. The new reiterated methodology, developed in 2023, evaluates this across five key areas of Teaching, Research Environment, Research Quality, International Outlook and Industry. *Times Higher Education's* data is trusted by governments and universities and is a vital resource for students, helping them choose where to study.

Important links:

THE WUR 2024 Final Rankings: <https://www.timeshighereducation.com/world-university-rankings/2024/world-ranking> (Live from 27 September 2023)

THE WUR 2024 Methodology: <https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2024-methodology> (Live from 20 September 2023)

Directors' Statement:

This document (the "Methodology") sets out our end-to-end process for generating the THE World University Rankings 2024 (the "Rankings"). As directors and management of Times Higher Education, we state that we have followed our Methodology and correctly applied the specific procedures denoted by (i) - (xii) and marked with the symbol "Ω".

Signed:



Print: Duncan Ross

Role: Chief Data Officer, *Times Higher Education*

Date: 20 September 2023

For and on behalf of *THE* World Universities Insights Limited

Summary of the Rankings methodology:

The *Times Higher Education* World University Rankings are the only global performance tables that judge research-intensive universities across all their core missions: teaching, research environment, research quality, international outlook and industry.

Since the rankings were launched 20 years ago, the methodology has been tweaked several times but altered substantially just once, in 2011. Those changes ensured that it remained robust as the global higher education landscape expanded and became more international. The 20th edition of the World University Rankings now sees another significant update to the methodology, so that it continues to reflect the outputs of the diverse range of research-intensive universities across the world, now and in the future.

The new methodology for this year's rankings includes significant updates to that employed since the 2011 – 2012 tables and revised in 2015 – 2016. Notably, we are introducing a wider range of bibliometric measures, improving international metrics, and expanding the role for knowledge transfer.

We have moved from 13 to 18 carefully calibrated performance indicators to provide the most comprehensive and balanced comparisons, trusted by students, academics, university leaders, industry and governments.

The 2024 World University Rankings, published in Autumn 2023, are the first rankings to follow the new methodology.

The performance indicators are still grouped into five areas: Teaching (the learning environment); Research environment (volume, income and reputation); Research quality; International outlook (staff, students and research); and Industry (knowledge transfer):

- **Teaching**
 - Teaching Reputation
 - Student Staff Ratio
 - Doctorate Bachelor Ratio
 - Doctorate Staff Ratio
 - Institutional Income
- **Research Environment**
 - Research Reputation
 - Research Income
 - Research Productivity
- **Research Quality**
 - Citation Impact
 - Research Strength
 - Research Excellence
 - Research Influence
- **International outlook**
 - International Students
 - International Staff
 - International Co-authorship
 - (Studying Abroad*)
- **Industry**
 - Industry Income
 - Patents

* This metric is not used in the calculation for this year's ranking.

1) Data collection and sources

Institutional data – self-submitted on the *THE* Portal*

A named representative from each institution submits and authorises their institutional data for use in the Rankings Ω^i , via *THE*'s designated online portal, with confirmations that they have:

- Provided true and accurate information for their institution for the year ending in 2021 (in accordance with the definitions and exceptions below); and
- Understood and complied with the *THE* terms and conditions → <https://www.timeshighereducation.com/terms-and-conditions>;

Times Higher Education will not self-submit data for an institution without positive confirmation from the named representative of the institution. Ω^{ii}

Prior to submission of data within the portal, the draft data undergoes certain automatic validation checks to ensure that data is complete and accurate, for review by the named representative. Ω^{iii}

****Only the data for UK institutions is provided to THE from HESA/JISC (<https://www.hesa.ac.uk/>) and undergoes review by a named representative from each institution.***

For the purposes of the portal data collection, a “year ending in 2021” may be defined as any of the following:

- The calendar year January to December 2021
- The academic year that started in 2020 and ended in 2021
- The financial year that ended in 2021
- Any other appropriate annual cycle that the institution finds to best fit their data and ends in 2021

Elsevier

Bibliometric data

This year, our bibliometric data supplier Elsevier examined more than 134 million citations to 16.5 million journal articles, article reviews, conference proceedings, books and book chapters published over five years. The data includes more than 27,950 active peer-reviewed journals indexed by Elsevier's Scopus database and all indexed publications between 2018 and 2022. Citations to these publications made in the six years from 2018 to 2023 are also collected.

The bibliometric measures help to show us how well each university is contributing to the sum of human knowledge: they tell us whose research has stood out, has been picked up and built on by other scholars and, most importantly, has been shared around the global scholarly community to expand the boundaries of human understanding, irrespective of discipline.

- The **Citation Impact** is a score per institution calculated by Elsevier from 2015 (until 2014 it was supplied by Web of Science). Elsevier provide the mean Field-Weighted Citation Impact (FWCI) score.

The FWCI score of a publication indicates how the number of citations received by the publication compares with the average number of citations received by all other similar publications. ‘Similar publications’ are understood to be publications in the Scopus database that have the same publication year, type, and discipline, as defined by the Scopus journal classification system (ASJC).

A FCWI of 1.00 indicates the global average across all publications.

The Citation Impact of an institution is the arithmetic mean of the eligible publications from the institution. It also blends equal measures of a country-adjusted and non-country-adjusted raw measure of citations scores. In 2015-2016 papers with more than 1,000 authors were excluded due to their disproportionate impact on the citation scores of the small number of universities. Since 2017 these papers have been reincorporated using a fractional counting approach to ensure that all universities where academics are authors of these papers will receive at least 5 per cent of the value of the paper. The institutions with the most contributors to the paper receive a proportionately larger contribution.

For territories or regions which cannot be country normalised by Elsevier, we have implemented a specific country normalisation. Since the publication of the WUR 2022, this includes Northern Cyprus. This is similar to the country normalisation by Elsevier, but the country average FWCI is estimated by the weighted sum of the FWCI's from the Northern Cyprus universities which have met the publication threshold this year.

- **Research Strength** represents the 75th percentile FWCI of all papers published by an institution. Compared with Citation Impact, Research Strength provides an alternative view of the “average” research quality that is less susceptible to the effect of extremely highly cited publications. The 75th percentile FWCI scores of institutions are calculated by Elsevier, per subject and overall, and supplied to THE from 2023 onwards.
- **Research Excellence** is calculated as the number of publications within the top 10 per cent of all publications by FWCI, normalised by year, subject, and staff size of the institution. This measure is subject-weighted.
- **Research Influence** measures the level of thought leadership by considering how influential the citing papers are. It differs from the other FWCI-based measures as it examines not only the number of the citations, but also the “importance” of citing publications. This measure is subject weighted.

Research Excellence and Research Influence are calculated by THE based on the raw data supplied by Elsevier.

For the purposes of these 3 metrics, all publications, including those with over 1,000 authors, are counted as whole and no country normalisation is incorporated.

- We also collect for each institution the total number of publications, the total number of publications with international co-authorship, and the total number of publications that are cited by patents, by subject and overall. Full counting is also applied for the purpose of metrics that use these indicators and no form of country-normalisation is applied.

Academic reputation survey

A survey was sent to a sample of academics selected by *THE*, in which we ask them to nominate the universities that they perceive to be the best for Teaching and/or Research in their field. For the 2022 and 2023 surveys, academics were asked to nominate up to 15 institutions for Teaching and up to 15 institutions for Research globally.

The most recent Academic Reputation Survey (run annually and conducted by THE) that underpins this category was carried out between October 2022 and January 2023. We have run the survey to ensure a balanced spread of responses across disciplines and countries. Where disciplines or countries were over- or under-represented, THE's data team weighted the responses to fully reflect the global distribution of scholars.

The 2023 data is combined with the results of the 2022 survey, giving over 900,000 votes to universities, with votes coming from more than 68,000 cited academics.

The Teaching and Research scores for an institution at the global level were the count of mentions they received in each category, weighted both to reflect the distribution of scholars across the world (using data from UNESCO) and the distribution of respondents by subject in the survey.

This year we have introduced a self-voting cap. This reduces the self-vote share to 10% of the total votes for any given university. Self-votes are still allowed and are included but are weighted down in much the same way as we apply country and subject weightings. The majority of ranked institutions are unaffected by this adjustment.

The academic reputation score for a university is the number of mentions they received for the 2022 and 2023 surveys in the global teaching and research sections. Where a university received no votes, they were allocated a zero score.

Total reputation score for each university was calculated based on the aggregate of individual respondent data obtained. Ω^{iv}

Reference data

THE incorporates reference datasets into its model to convert country-level data provided by institutions via the portal (e.g. research income in a local currency) to a single comparable dataset for all institutions. We also use reference datasets to verify institutional data submissions.

The sources of this data are:

- The HM Revenue and Customs (HMRC) monthly datasets: [<https://www.gov.uk/government/publications/hmrc-exchange-rates-for-2021-monthly>], which provides accurate foreign exchange rates to convert datasets into GBP and then back into their local currency if an institution reports in a foreign currency;
- The World Bank Purchase Power Parity (PPP) dataset [<http://data.worldbank.org/indicator/PA.NUS.PPP>], which is used to convert the local currency to common-PPP-scaled USD. PPP is used to exemplify the differing currency strengths in each country while allowing for easy cross-country comparisons;
- Where data for a country doesn't exist in the World Bank database, a dataset from the IMF [<https://www.imf.org/en/Publications/WEO/weo-database/2022/April>] or UN data is used [http://data.un.org/Data.aspx?d=WDI&f=Indicator_Code%3APA.NUS.PPP];
- The World Bank Population data: [<https://data.worldbank.org/indicator/SP.POP.TOTL>], which provides the total population per country;
- UNESCO data for reputation: [<http://data.uis.unesco.org>], which provides the distribution of scholars across the world by country and subject; and
- External datasets corresponding to over 74 governmental and non-governmental sources for quality checking and verification of institutional data.

2) Criteria for exclusion, inclusion, and data processing

Exclusion and inclusion criteria

There are seven key criteria for universities to be included in the Rankings:

1. They are required to publish more than 1,000 relevant publications over the previous 5 years, and more than 150 relevant publications in any single year. This criterion was based on the publication count including kilo-authored fractional counting until the 2024 rankings, when we changed to the full publication count.

AND

2. They must teach at an undergraduate level, usually indicated by having more than zero undergraduate degrees awarded. Postgraduate-only institutions are therefore not in the ranking.

AND

3. They must not be focused on a single narrow subject area (more than 80% of their publication output is from one subject area).

AND

4. They must have supplied “overall” numbers for the ranking year.

AND

5. They must not have more than two of the critical values (academic staff, international academic staff, research staff, students, international students, outbound exchange students, undergraduate degrees awarded, doctorates awarded, institutional income, research income, research income from industry and commerce) as empty, unavailable, or withheld. Missing values will cause any metric based on that value to also be invalid.

AND

6. They must mark at least one subject as applicable. If no applicable subjects have been reported the institution is excluded.

AND

7. They must not be featured in the custom exclusions list. Institutions that have requested not to participate in the ranking or that are not eligible for other institution-specific reasons have been excluded.

Universities meeting the seven key inclusion criteria are included in the rankings. Ω^v

Universities who have met criteria number 4, 6 and 7, but not all of the remaining criteria will not be included in the rankings. They will be listed as “Reporters” and they will not have any scores.

Subject ranking criteria: Publication eligibility

For the eleven subject tables, there is an additional threshold within the subject for publications:

For the subjects that generate a high volume of publications:

- At least 500 publications over 2018 – 2022 for Clinical and Health, Computer Science, Engineering, Life Sciences, Physical Sciences;

For the subjects with lower volumes of publications:

- At least 250 publications over 2018 – 2022 for Arts and Humanities;
- At least 200 publications over 2018 – 2022 for Business and Economics, Social Sciences;
- At least 150 publications over 2018 – 2022 for Psychology;
- At least 100 publications over 2018 – 2022 for Education, Law.

Subject	Publications for 5 years (2018 – 2022)
Overall	1000 (150 per year)
Arts and Humanities	250
Business and Economics	200
Clinical and Health	500
Computer Science	500
Education	100
Engineering	500
Law	100
Life Sciences	500
Physical Sciences	500
Psychology	150
Social Sciences	200

Subject ranking criteria: Staff eligibility

We also expect an institution to either have at least a proportion of its academic staff in a discipline (4% for Engineering or Social Sciences, 1% for Computer Science, Psychology, Law or Education; 5% for other subjects), or an absolute number of staff threshold.

Subject	Proportion of academic staff	Absolute number of academic staff (FTE) in a given subject
Arts and Humanities	5%	50
Business and Economics	5%	50
Clinical and Health	5%	50
Computer Science	1%	20
Education	1%	20
Engineering	4%	40
Law	1%	20
Life Sciences	5%	50
Physical Sciences	5%	50
Psychology	1%	20
Social Sciences	4%	40

Data adjustments

After the deadline of the submission of data via the Portal by institutions, **management review and approve all institution submissions data for appropriateness and accuracy, based on prior year values and gaps within datasets** Ω^{vi} as described below.

On the occasions where an institution does not provide a data point which would result in the inability to generate a metric, the missing metric may be calculated by imputing the value as the higher of:

- The average of the two lowest metric scores for an institution; or
- The minimum score awarded across the whole population for that metric.

Data processing pre-rankings

Data provided by institutions for financial information is converted into USD using international PPP exchange rates Ω^{vii} (provided by the World Bank), for use in the Rankings calculation.

The datasets used in the rankings have been accurately mapped by university name and ID. Institution-level bibliometric (Scopus and/or SciVal) data obtained from Elsevier is mapped to THE institution data via THE's institution ID. Ω^{viii}

3) Calculation, scoring and ranking

Calculation of metrics

There are 18 indicators, each combined into 5 categories, or “pillars”, which are weighted according to relative importance. One of these (Study Abroad) has a zero weigh.

The pre-weighted indicators are calculated for each university Ω^{ix} based on the definitions below:

1. Teaching

Teaching Reputation

- The most recent Academic Reputation Survey (run annually, this year conducted by THE) that underpins this category was carried out between October 2022 and January 2023. It examined the perceived prestige of institutions in teaching. This metric is the total number of votes obtained from the reputation survey from the last two years. Each year is calculated as the number of global teaching votes from respondents of the reputation survey, weighted by subject and country to be representative of the distribution of academics globally. Only non-zero values will be standardised using a logarithmic function, and universities that received no votes are scored a zero for this metric.

Student Staff Ratio

- The student staff ratio is defined as total full time equivalent (FTE) number of staff employed in an academic post divided by FTE number of students in all years and of all programmes that lead to a degree, certificate, university credit or other qualification. This variable is normalised after calculation.

Doctorate Bachelor Ratio

- This metric is generated by dividing the total number of doctorates awarded by the total number of undergraduate degrees awarded. This variable is normalised after calculation.

Doctorate Staff Ratio

- As well as giving a sense of how committed an institution is to nurturing the next generation of academics, a high proportion of postgraduate research students also suggests the provision of teaching at the highest level that is thus attractive to graduates and effective at developing them. This metric is generated by dividing the total subject weighted doctorates, by the total subject weighted number of academic staff. This metric takes into account an institution's unique subject mix, reflecting that the volume of doctoral awards varies by discipline. This variable is normalised after calculation.

Institutional Income

- This measure of income indicates an institution's general status and gives a broad sense of the infrastructure and facilities available to students and staff. This metric is generated by dividing the institutional income adjusted to PPP, by the total number of academic staff. This variable is normalised after calculation.

2. Research Environment

Research Reputation

- The most recent Academic Reputation Survey (run annually, this year conducted by THE) that underpins this category was carried out between October 2022 and January 2023. It examined the perceived prestige of institutions in research. This metric is the total number of votes obtained from the reputation survey from the last two years. Each year is calculated as the number of global research votes from respondents of the reputation survey, weighted by subject and country to be representative of the distribution of academics globally. Only non-zero values will be standardised using a logarithmic function, and universities that received no votes are scored a zero for this metric.

Research Income

- This metric is generated by dividing the total subject weighted research income adjusted for PPP, by the total subject weighted number of academic staff and is normalised after calculation. This is a somewhat controversial indicator because it can be influenced by national policy and economic circumstances. Income is crucial to the development of world-class research, and because much of it is subject to competition and judged by peer review, our experts suggested that it was a valid measure. This indicator takes account of each institution's distinct subject profile, reflecting the fact that research grants in science subjects are often bigger than those awarded for the highest-quality social science, arts and humanities research.

Research Productivity

- This metric is generated by dividing the total subject weighted number of papers published in the academic journals indexed by Elsevier's Scopus database per scholar, divided by the sum of the total subject weighted number of FTE research staff and FTE academic staff. This metric is normalised after calculation. The indicator gives a sense of the institution's ability to get papers published in quality peer-reviewed journals. Introduced in the 2018 rankings, we devised a method to give credit for cross-subject research that results in papers being published in subjects where a university has no staff. For subjects where there are papers, but not staff, we will reassign the papers to subjects where there are staff. We will do this proportionally according to the number of staff in populated subjects, and according to the median publications per staff for populated subjects. We will have a maximum threshold of the proportion of papers that we are willing to reassign (10% of the total of papers).

3. Research Quality

Citation Impact

- Our research influence metric looks at universities' role in spreading new knowledge and ideas. We examine research influence by capturing the average number of times a university's published work is cited by scholars globally. We look at the academic journals indexed by Elsevier's Scopus database and all indexed publications between 2018 and 2022. Citations to these publications made in the six years from 2018 to 2023 are also collected. The data is normalised by Elsevier to reflect variations in citation volume between different subject areas. This means that institutions with high levels of research activity in subjects with traditionally high citation counts do not gain an unfair advantage. We have blended equal measures of a country-adjusted and non-country-adjusted raw measure of citations scores.

Research Strength

- Our research strength metric measures the representative research quality based on the FWCI, but without being skewed by papers with an exceptionally high FWCI. It captures the 75th percentile of the Field-Weighted Citation Impact (FWCI) of all papers published by a university. We look at all Scopus-indexed publications between 2018 and 2022 and the corresponding citations to these publications made in the six years from 2018 to 2023 are also collected.

Research Excellence

- This metric recognises the institution's contribution to the best research in each subject and overall. Excellence is measured by capturing the total number of publications by an institution that are among the top 10% of publications worldwide by FWCI. We adjust this number by year, subject, and the total number of academic and research staff.

Research Influence

- This metric analyses the influence of an entity's publications by analysing their corresponding citations. The importance of a publication is determined based on the importance of other papers citing it. We adjust this number by year, subject, and the total number of academic and research staff.

4. *International outlook*

International Students

- This metric captures the proportion of international students on campus. International students are those whose nationality differs from the country where the institution is based. The metric is calculated as the total FTE number of international students divided by the total FTE number of students. This variable is normalised to account for the country population's size.

International Staff

- This metric captures the proportion of international academic staff on campus. International staff are those whose nationality differs from the country where the institution is based. The metric is calculated as the total FTE number of international academic staff divided by the total FTE number of academic staff. This variable is normalised to account for the country population's size.

International Co-authorship

- In the third international indicator, we calculate the proportion of an institution's total research journal publications that have at least one international co-author. The metric is generated by dividing the total subject weighted number of publications with at least one international co-author by the total subjected weighted number of publications. This accounts for an institution's subject mix. This variable is normalised to account for the country population's size.

Studying Abroad

- Based on the number of outbound exchange students, this metric assesses international student mobility. The headcount number of exchange students going abroad is divided by the total FTE number of students. This metric is subject-weighted and adjusted by the country's population. It has a zero weight for the 2024 ranking calculation.

5. *Industry*

Industry Income

- An institution's ability to help industry with innovations, inventions and consultancy has become a core mission of the contemporary global academy. This category suggests the extent to which businesses are willing to pay for research and an institution's ability to attract funding in the commercial marketplace – useful indicators of institutional quality. The indicator seeks to capture such knowledge-transfer activity by looking at how much research income an institution earns from industry (adjusted for PPP), divided by the total number of FTE academic staff it employs. This variable is normalised after calculation.

Patents

- This metric recognises the extent to which universities are supporting their national economies through technology transfer. It measures the count of patents citing an entity's published research. This measure is subject weighted to avoid penalising universities producing research in fields low in patents. We also normalise this by the sum of academic and research staff.

Normalisation

Moving from a series of specific data points to indicators, and finally to a total score for an institution, requires us to match values that represent fundamentally different data. To do this we use a standardisation approach for each indicator, and then combine the indicators in the proportions indicated below.

The standardisation approach we use is based on the distribution of data within a particular indicator, where we calculate a cumulative probability function, and evaluate where a particular institution's indicator sits within that function.

For all metrics except the Academic Reputation Survey metrics, Research Excellence, Research Influence, and Patents, we calculate the cumulative probability function using a version of Z-scoring. The distribution of the data in these exceptional metrics requires us to use an exponential component.

Weightings of metrics to final scores and rankings

The 18 performance metrics representing the five pillars are weighted according to *THE*'s assessment of relative importance.

Once the final population of universities and indicators has been prepared, the scores for each university are generated by weighting the metrics and the Final Rankings are calculated according to the following percentage breakdowns: Ω^x

Pillar	Metric	% weighting
1. Teaching	Teaching Reputation	15.00
	Student Staff Ratio	4.50
	Doctorate Bachelor Ratio	2.00
	Doctorate Staff ratio	5.50
	Institutional Income	2.5
2. Research Environment	Research Reputation	18.00
	Research Income	5.50
	Research Productivity	5.50
3. Research Quality	Citation Impact	15.00
	Research Strength	5.00
	Research Excellence	5.00
	Research Influence	5.00
4. International outlook	International Students	2.50
	International Staff	2.50
	International Co-authorship	2.50
	Studying Abroad	0.00
5. Industry	Industry income	2.00
	Patents	2.00
		100

Subject ranking differentiation

The subject tables employ the same range of 18 performance indicators used in the overall World University Rankings, brought together with scores provided under the same five pillars:

- Teaching;
- Research Environment;
- Research Quality;
- International Outlook; and
- Industry.

However, within the subject rankings, the overall methodology is carefully recalibrated by subject, with the weightings changed to best suit the individual fields. In particular, those given to the research indicators have been altered to fit more closely the research culture in each subject, reflecting different publication habits: in arts and humanities, for instance, where the range of outputs extends well beyond peer-reviewed journals, we give less weight to paper citations.

Accordingly, the weight given to “citations: research influence” is halved from 15% in the overall rankings to just 7.5% for the arts and humanities. More weight is given to other research indicators, including the Academic Reputation Survey. For social sciences and law, where there is also less faith in the strength of citations alone as an indicator of research excellence, the measure’s weighting is reduced to 12.4%. It is also reduced for education, engineering and computer science to 13.7%.

By the same token, in those subjects where the vast majority of research outputs come through journal articles and where there are high levels of confidence in the strength of citations data, we have increased the weighting given to the research influence (up to 17.5% for the physical, life sciences, psychology and for the clinical and health tables).

	Indicator	Overall	Arts and Humanities	Business and Economics	Clinical and Health	Computer Science	Education	Engineering	Law	Life Sciences	Physical Sciences	Psychology	Social Sciences
t1	Teaching Reputation	15.00%	25.30%	21.10%	17.90%	19.50%	20.00%	19.50%	21.00%	17.90%	17.90%	17.90%	21.10%
t2	Student Staff Ratio	4.50%	3.90%	3.30%	2.80%	3.00%	4.50%	3.00%	4.50%	2.80%	2.80%	2.80%	3.30%
t3	Doctorate Bachelor Ratio	2.00%	1.70%	0.00%	1.20%	1.00%	0.00%	1.00%	0.00%	1.20%	1.20%	1.20%	1.40%
t4	Doctorate Staff Ratio	5.50%	4.30%	4.20%	3.30%	3.00%	5.30%	3.00%	4.20%	3.30%	3.30%	3.30%	4.30%
t5	Institutional Income	2.50%	2.10%	1.80%	1.60%	1.50%	2.40%	1.50%	2.50%	1.60%	1.60%	1.60%	1.80%
r1	Research Reputation	18.00%	30.00%	22.80%	19.30%	21.00%	20.00%	21.00%	21.00%	19.30%	19.30%	19.30%	22.80%
r2	Research Income	5.50%	3.60%	4.40%	3.60%	4.00%	4.40%	4.00%	4.40%	3.60%	3.60%	3.60%	4.40%
r3	Research Productivity	5.50%	3.60%	4.40%	3.60%	4.00%	4.40%	4.00%	4.40%	3.60%	3.60%	3.60%	4.40%
c1	Citation Impact	15.00%	7.50%	13.00%	17.50%	13.70%	13.70%	13.70%	12.40%	17.50%	17.50%	17.50%	12.40%
c2	Research Strength	5.00%	2.50%	4.00%	5.90%	4.60%	4.60%	4.60%	4.20%	5.90%	5.90%	5.90%	4.20%
c3	Research Excellence	5.00%	2.50%	4.00%	5.90%	4.60%	4.60%	4.60%	4.20%	5.90%	5.90%	5.90%	4.20%
c4	Research Influence	5.00%	2.50%	4.00%	5.90%	4.60%	4.60%	4.60%	4.20%	5.90%	5.90%	5.90%	4.20%
e1	Industry Income	2.00%	1.50%	2.00%	2.00%	4.00%	2.00%	4.00%	2.00%	2.00%	2.00%	2.00%	2.00%
e2	Patents	2.00%	1.50%	2.00%	2.00%	4.00%	2.00%	4.00%	2.00%	2.00%	2.00%	2.00%	2.00%
i1	International Students	2.50%	2.50%	3.00%	2.50%	2.50%	2.50%	2.50%	3.00%	2.50%	2.50%	2.50%	2.50%
i2	International Staff	2.50%	2.50%	3.00%	2.50%	2.50%	2.50%	2.50%	3.00%	2.50%	2.50%	2.50%	2.50%
i3	International co-authorship	2.50%	2.50%	3.00%	2.50%	2.50%	2.50%	2.50%	3.00%	2.50%	2.50%	2.50%	2.50%
i4	Studying Abroad	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

4) Publication and reporting

Final rankings preparation

All institutions were ranked overall and are published in the final rankings table on the *THE* website. On the website, the overall score and pillar scores are displayed.

Precise overall scores are shown for the institutions ranked in the top 200 overall. Banded overall scores are presented for the institutions ranked in bands (e.g. from 201 to 250). Precise individual pillar scores are displayed for each ranked institution.

For the institutions ranked 1 – 200 overall, an individual rank position is listed. The next institutions are assigned to the following bands: 201-250, 251-300, 301-350, 351-400, 401-500, 501-600, 601-800, 801-1000, 1001-1200, 1201-1500, 1501+.

Institutions with the ‘Reporter’ status appear at the end of the table, and they do not have any rank or scores.

We have considered the positions of Ukrainian universities in light of our published commitment. The steps taken towards that can be found on the [World University Rankings 2024 table information](#). (Live from 27 September).

Review and sign off

The Rankings are formally signed off by *THE* World Universities Insights Limited management prior to being published in print and online.

The Rankings results are reviewed and signed off by THE’s Chief Data Officer. Ω^{xi}

Reporting

The Rankings for the top 200 universities and banding allocation below top 200 are accurately reported on the THE website. Ω^{xii}

The specific procedures for the Overall Rankings are located on the *Times Higher Education* website at: <https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2024-methodology>.

Rule number	Methodology section	Rule description
(i)	Data collection and sources	A named representative from each institution submits and authorises their institutional data for use in the Rankings.
(ii)	Data collection and sources	<i>Times Higher Education</i> will not self-submit data for an institution without positive confirmation from the named representative of the institution.
(iii)	Data collection and sources	Prior to submission of data within the portal, the draft data undergoes automatic validation checks reviewed by the named representative.
(iv)	Criteria for exclusion, inclusion and data processing	Total reputation score for each university was calculated based on the aggregate of individual respondent data.
(v)	Criteria for exclusion, inclusion and data processing	Universities meeting the seven key inclusion criteria are included in the rankings.
(vi)	Criteria for exclusion, inclusion and data processing	Management review and approve all institution submissions data for appropriateness and accuracy, based on prior year values and gaps within datasets.
(vii)	Criteria for exclusion, inclusion and data processing	Data provided by institutions for financial information is converted into USD using international PPP exchange rates.
(viii)	Criteria for exclusion, inclusion and data processing	Institution-level bibliometric (Scopus and/or SciVal) obtained from Elsevier is mapped to <i>THE</i> institution data via <i>THE</i> 's institution ID.
(ix)	Calculation, scoring and ranking	The pre-weighted indicators are calculated for each university.
(x)	Calculation, scoring and ranking	Once the final population of institutions and indicators has been prepared, the scores for each university are generated by weighting the metrics and the Final Rankings are calculated according to the following percentage breakdowns.
(xi)	Publication and reporting	The Rankings results are reviewed and signed off by <i>THE</i> 's Chief Data Officer.
(xii)	Publication and reporting	The Rankings for the top 200 universities and banding allocation below top 200 are accurately reported on the <i>THE</i> website. The 'Reporters' are listed at the end of the table.