

# **A Universidade do Porto no Times Higher Education: - World University Rankings 2022 - World University Rankings by subject 2022**

Reitoria da Universidade do Porto  
Gabinete de avaliação e qualidade  
3 de novembro de 2021

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# A Universidade do Porto no Times Higher Education World University Rankings 2022 e World University Rankings 2022 by subject

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

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

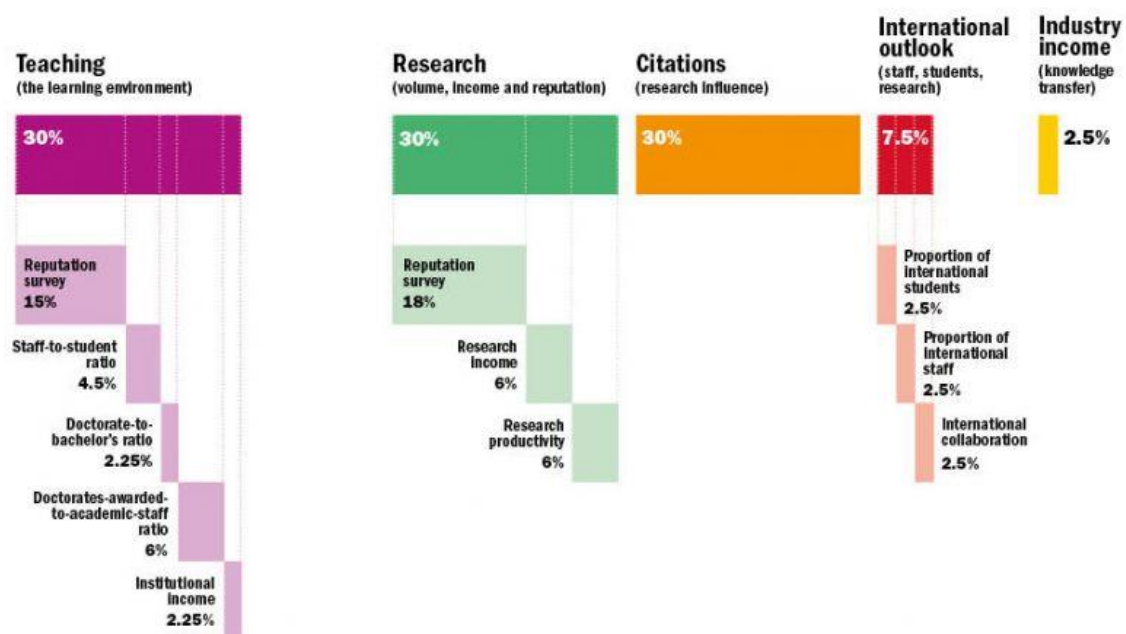
## 1. Metodologia do THE WUR e THE WUR by subject

### 1.1 Metodologia do THE WUR

“From the information that we are provided by institutions across the globe, we rigorously build up our World University Rankings. This is how we assess data on more than 1,600 institutions to produce the tables

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

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



#### Teaching (the learning environment) - 30%

- Reputation survey: 15%
- Staff-to-student ratio: 4.5%
- Doctorate-to-bachelor's ratio: 2.25%
- Doctorates-awarded-to-academic-staff ratio: 6%
- Institutional income: 2.25%

The most recent Academic Reputation Survey (run annually) that underpins this category was carried out between November 2020 and February 2021. It examined the perceived prestige of institutions in teaching and research. The responses were statistically representative of the geographical and subject mix of academics globally. The 2021 data are combined with the results of the 2020 survey, giving almost 22,000 responses.

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 (volume, income and reputation) - 30%**

- Reputation survey: 18%
- Research income: 6%
- Research productivity: 6%

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. Last year, we devised a method to give credit for papers that are published in subjects where a university declares no staff.

### **Citations (research influence) - 30%**

Our research influence indicator 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. This year, our bibliometric data supplier Elsevier examined more than 108 million citations to 14.4 million journal articles, article reviews, conference proceedings, books and book chapters published over five years. The data include more than 24,600 academic journals indexed by Elsevier's Scopus database and all indexed publications between 2016 and 2020. Citations to these publications made in the six years from 2016 to 2021 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.

In 2015-16, we excluded papers with more than 1,000 authors because they were having a disproportionate impact on the citation scores of a small number of universities. In 2016-17, we designed a method for reincorporating these papers. Working with Elsevier, we developed a fractional counting

approach that ensures that all universities where academics are authors of these papers will receive at least 5 per cent of the value of the paper, and where those that provide the most contributors to the paper receive a proportionately larger contribution.

#### **International outlook (staff, students, research) - 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 "Citations: research influence" category.

#### **Industry income (knowledge transfer) - 2.5%**

A university's ability to help industry with innovations, inventions and consultancy has become a core mission of the contemporary global academy. This category 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 category 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.

#### **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 2016 and 2020 (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.

#### **Data collection**

Institutions provide and sign off their institutional data for use in the rankings. On the rare occasions when a particular data point is not provided, we enter a conservative estimate for the affected metric. 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 all indicators except for the Academic Reputation Survey, we calculate the cumulative probability function using a version of Z-scoring. The distribution of the data in the Academic Reputation Survey requires us to add an exponential component."<sup>1</sup>

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<sup>1</sup><https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2022-methodology>, acedido 2 de setembro de 2021

## 1.2 Metodologia do THE WUR by Subject

### “Different weights and measures

The subject tables employ the same range of 13 performance indicators used in the overall World University Rankings 2022, 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.

(...)

### Criteria

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

No institution can be included in the overall World University Rankings unless it has published a minimum of 1,000 relevant publications over the five years that we examine.

For the 11 subject tables, the publication thresholds are set differently.

(...)

There is also an academic staff eligibility criterion. Prior to the 2019 subject rankings, an institution had to have at least 5 per cent of its academic staff working in the clinical, pre-clinical and health discipline to be included in the subject table.

Since the 2019 subject rankings, we have made a small adjustment to the staff eligibility criterion. An institution needs to have either a minimum proportion of its staff or a minimum number of staff in this discipline to be included in the subject ranking.”<sup>2</sup>

A metodologia de cada uma das 11 áreas consta em [anexo](#).

## 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*<sup>3</sup> 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 2019 e foi reportada em março de 2021.

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<sup>2</sup> <https://www.timeshighereducation.com/world-university-rankings-2022-subject-clinical-and-health-methodology> ,  
acedido 20210916

<sup>3</sup> <http://ip-science.thomsonreuters.com/globalprofilesproject/>

## 2. THE WUR

### 2.1 A U.Porto no THE WUR

#### Evolução<sup>4</sup> das posições da Universidade do Porto no THE WUR

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

\* 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	Citations	Industry income	International outlook	Overall score <sup>5</sup>	Rank
	<b>30%</b>	<b>30%</b>	<b>30%</b>	<b>2,5%</b>	<b>7,5%</b>		
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
2014 <sup>6</sup>	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

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.

<sup>4</sup> 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](https://sigarra.up.pt/up/pt/conteudos_service.conteudos_cont?pct_id=20113&pv_cod=55GoHdmanvlg); dados de 2014 a 2021 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 e 2 de setembro de 2021.

<sup>5</sup> O Overall score foi calculado usando as ponderações dos 5 indicadores.

<sup>6</sup> Thomson Reuters, Global Institutional Profiles Project 2014 Profile: University of Porto.

## Evolução dos 13 indicadores

	2011 <sup>7</sup>	2012 <sup>8</sup>	2013 <sup>9</sup>	2014 <sup>10</sup>	2015 <sup>11</sup>	2016 <sup>12</sup>	2017 <sup>13</sup>	2018 <sup>14</sup>	2019 <sup>15</sup>	2020 <sup>16</sup>	2021 <sup>17</sup>
<b>TEACHING INDICATORS</b>											
Students to academic staff	34	37	35	41	39,2	38,0	40,3	38,3	39,5	41,1	43,5
Doctoral degrees awarded / undergraduate degrees awarded	34	41	40	51	47,2	48,0	47,6	52,1	51,4	51	47,2
Doctoral degrees awarded / academic staff	24	35	29	49	45,4	48,1	47,1	49,8	47,9	44,1	36,7
Teaching reputation	8	18	9	10	20,8	15,0	10,2	11	11,2	9,9	10
Institutional income / academic staff	19	24	27	26	41,0	29,0	39,3	31,9	32,4	32,8	35,8
<b>RESEARCH INDICATORS</b>											
Papers / academic and research staff (normalized)	23	39	45	47	53,4	61,5	76,5	79,2	81,5	80,5	83,2
Research income / academic staff (normalized)	24	23	25	28	30,9	31,7	33,5	33,8	33,8	37,4	41
Research reputation	6	15	6	8	18,9	12,6	8,2	7,6	8,1	7,2	6,8
<b>CITATIONS</b>											
Citation Impact	44	51	48	44	37,2	42,3	47	55,7	62,1	66,1	64
<b>INDUSTRY INDICATORS</b>											
Research income from industry / academic staff	34	36	37	36	38,7	39,9	39,8	38,8	38,7	38,4	40,8
<b>INTERNATIONAL OUTLOOK INDICATORS</b>											
Academic staff - international / academic staff	19	24	24	23	23,2	24,5	24,9	25,3	25,5	29,1	32,3
Students - international / students	30	35	36	38	39,9	39,5	45,5	52,7	61,9	70,3	75,3
Papers - international co-author / papers	76	71	72	68	73,2	71,9	74,3	73,4	74,2	74,4	74,7

<sup>7</sup> Thomson Reuters, Global Institutional Profiles Project 2011 Profile: University of Porto.

<sup>8</sup> Thomson Reuters, Global Institutional Profiles Project 2012 Profile: University of Porto.

<sup>9</sup> Thomson Reuters, Global Institutional Profiles Project 2013 Profile: University of Porto.

<sup>10</sup> Thomson Reuters, Global Institutional Profiles Project 2014 Profile: University of Porto.

<sup>11</sup> THEDataPoints. 2015. University of Porto.

<sup>12</sup> THEDataPoints. 2016. University of Porto.

<sup>13</sup> THEDataPoints. 2017. University of Porto.

<sup>14</sup> THEDataPoints. 2018. University of Porto.

<sup>15</sup> THEDataPoints. 2019. University of Porto.

<sup>16</sup> THEDataPoints. 2020. University of Porto.

<sup>17</sup> THEDataPoints. 2021. University of Porto.

## 2.2. As Universidades portuguesas no THE WUR

### Posições

	Mundo			Europa			Ibero-América			Portugal		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
<b>Catholic University of Portugal</b>	351–400	351–400	351–400	169-194	164-191	164-191	7	7-8	7	1	1	1
<b>NOVA University of Lisbon</b>	601–800	351–400	401–500	282-361	164-191	192-243	22-50	7-8	8-15	4-9	2	2-3
<b>University of Porto</b>	401–500	401–500	401–500	195-240	192-246	192-243	8-12	9-15	8-15	2	3	2-3
<b>University of Lisbon</b>	501–600	501–600	501–600	241-281	247-282	244-285	13-21	16-22	16-23	3	4	4
<b>University of Beira Interior</b>	601–800	601–800	601–800	282-361	283-365	286-362	22-50	23-48	24-40	4-9	5-8	5-7
<b>University of Coimbra</b>	601–800	601–800	601–800	282-361	283-365	286-362	22-50	23-48	24-40	4-9	5-8	5-7
<b>ISCTE-University Institute of Lisbon</b>	601–800	601–800	601–800	282-361	283-365	286-362	22-50	23-48	24-40	4-9	5-8	5-7
<b>University of Algarve</b>	801–1000	801–1000	801–1000	362-428	366-431	363-430	51-82	49-74	41-68	10-13	9-10	8-11
<b>University of Aveiro</b>	601–800	601–800	801–1000	282-361	283-365	363-430	22-50	23-48	41-68	4-9	5-8	8-11
<b>University of Minho</b>	601–800	801–1000	801–1000	282-361	366-431	363-430	22-50	49-74	41-68	4-9	9-10	8-11
<b>University of Trás-os-Montes and Alto Douro</b>	801–1000	1001+	801–1000	362-428	432+	363-430	51-82	75+	41-68	10-13	11-12	8-11
<b>Polytechnic Institute of Porto</b>	801–1000	1001+	1001–1200	362-428	432+	431-493	51-82	75+	69-100	10-13	11-12	12
<b># IES</b>	1396	1527	1662	539	589	643	159	172	189	13	12	12



# Indicadores

	Teaching 30%			Research 30%			Citations 30%			Industry Income 2,5%			International Outlook 7,5%			Overall Score		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
<b>Catholic University of Portugal</b>	18,3	19,3	19	15	13,4	14,5	94,6	95,8	98,3	35,9	35,3	36,6	47,4	57,5	62	42,4–44,4	43,6–45,5	44,1–46,0
<b>NOVA University of Lisbon</b>	24,9	25,1	25,3	25,7	28,2	29,5	46,6	76,6	70,4	46,7	45,5	49,7	60,2	61,2	63,6	28,3–35,2	43,6–45,5	40,9–44,0
<b>University of Porto</b>	27,4	26,2	25,1	27,9	27,9	28,9	62,1	66,1	64	38,7	38,4	40,8	53,9	57,9	60,8	38,8–42,3	39,8–43,5	40,9–44,0
<b>University of Lisbon</b>	25,2	25,2	24,8	29,8	31,1	32,6	52,7	53,6	56,2	39,2	39,4	42	53,8	57,7	60,6	35,3–38,7	36,4–39,7	38,1–40,8
<b>University of Beira Interior</b>	17,9	17,7	18,6	16,5	17,6	19,6	48,7	50,8	52,6	34,7	34,6	37,5	52,7	56,5	57,4	28,3–35,2	30,2–36,3	32,0–37,9
<b>University of Coimbra</b>	23,7	27,1	24,5	28,1	28,3	32	47,4	46,7	45,4	41	40,4	47	58,7	58	60	28,3–35,2	30,2–36,3	32,0–37,9
<b>ISCTE-University Institute of Lisbon</b>	23	24,9	27,8	26,4	27,1	28,8	29,3	38	39,6	39,8	36,1	40,8	49,3	50,8	53,8	28,3–35,2	30,2–36,3	32,0–37,9
<b>University of Algarve</b>	17,3	16,9	17,4	13,5	13,6	16,1	40,2	43,5	40,3	35,3	33,7	36,1	63,1	66,6	68,1	22,2–28,2	25,1–30,1	27,2–31,9
<b>University of Aveiro</b>	24,7	24,7	23,3	25,5	26,2	23,8	40,7	42,1	42,4	41,4	41,3	37,5	52,5	54,7	50	28,3–35,2	30,2–36,3	27,2–31,9
<b>University of Minho</b>	22,5	23,2	24	19,4	20,5	22,8	34,6	37	38,6	62,6	62,8	52,3	50,3	54	57,1	28,3–35,2	25,1–30,1	27,2–31,9
<b>University of Trás-os-Montes and Alto Douro</b>	21,2	19,2	20,6	13,9	15,4	28,1	32,3	32,9	33,6	34,4	33,4	34,8	37,5	41	43,4	22,2–28,2	10,3–25,0	27,2–31,9
<b>Polytechnic Institute of Porto</b>	13,5	14,1	14,5	8,7	9,4	9,8	48,5	44,6	51,6	34,6	33,5	35	32,8	34,9	36,5	22,2–28,2	10,3–25,0	22,4–27,1

### 3. THE WUR by subject

#### 3.1 A U.Porto no THE WUR by subject

Evolução<sup>18</sup> das posições

		2017	2018	2019	2020	2021
<b>Arts and humanities</b>	Mundo	301-400	301-400	301-400	301-400	301-400
	Europa	158-200	155-207	158-211	158-207	157-208
	Iberoam	14-26	13-25	15-28	15-26	14-23
	PT	3-5	2-4	3-6	3-6	3-6
<b>Business and economics</b>	Mundo	n/c	401-500	401-500	501-600	501-600
	Europa		171-216	172-220	221-263	220-264
	Iberoam		18-33	17-34	31-41	27-43
	PT		4-7	4-9	8-9	7-9
<b>Clinical and health</b>	Mundo	251-300	251-300	251-300	251-300	301-400
	Europa	119-140	113-137	109-129	99-127	126-176
	Iberoam	8	9-10	9-13	13-17	18-25
	PT	1	1	1	3	3-4
<b>Computer science</b>	Mundo		401-500	401-500	401-500	401-500
	Europa		188-228	178-223	168-219	168-207
	Iberoam		20-29	14-28	11-23	10-21
	PT		3-4	2-4	2-4	1-2
<b>Education</b>	Mundo		126-150	176-200	251-300	301-400
	Europa		46-59	69-77	99-121	128-173
	Iberoam		3	9-12	16	14-29
	PT		1	2-3	4	3-4
<b>Engineering</b>	Mundo	301-400	401-500	301-400	301-400	401-500
	Europa	117-172	160-208	109-151	103-143	140-180
	Iberoam	5-20	14-31	4-12	3-9	6-17
	PT	2-6	3-7	1-2	1-2	2-4
<b>Law</b>	Mundo	n/c	n/c	n/c	n/c	n/c
<b>Life sciences</b>	Mundo	301-400	301-400	301-400	301-400	301-400
	Europa	149-189	144-187	140-188	139-185	140-190
	Iberoam	8-18	7-13	6-13	5-14	7-16
	PT	2-4	1-4	1-3	1-3	1-3
<b>Physical sciences</b>	Mundo	401-500	401-500	401-500	501-600	501-600
	Europa	203-244	194-237	194-232	227-272	222-258
	Iberoam	10-28	11-24	11-18	15-28	15-27
	PT	1-5	1-4	1-2	1-6	1-6
<b>Psychology</b>	Mundo		301-400	401+	401-500	401-500
	Europa		134-184	180+	183-225	182-228
	Iberoam		14-21	16+	21-43	23-39
	PT		5	4-5	5-6	3-5
<b>Social sciences</b>	Mundo	301-400	301-400	401-500	401-500	401-500
	Europa	137-182	140-181	178-228	178-226	183-223
	Iberoam	11-18	10-19	18-29	17-30	15-27
	PT	3-5	2-5	5-7	5-9	2-8

<sup>18</sup>Dados de 2017 a 2021 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; e entre 16 de setembro e 3 de novembro de 2021.

Evolução dos indicadores

		Arts & humanities	Business & economics	Clinical and 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
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
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
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
Research	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
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

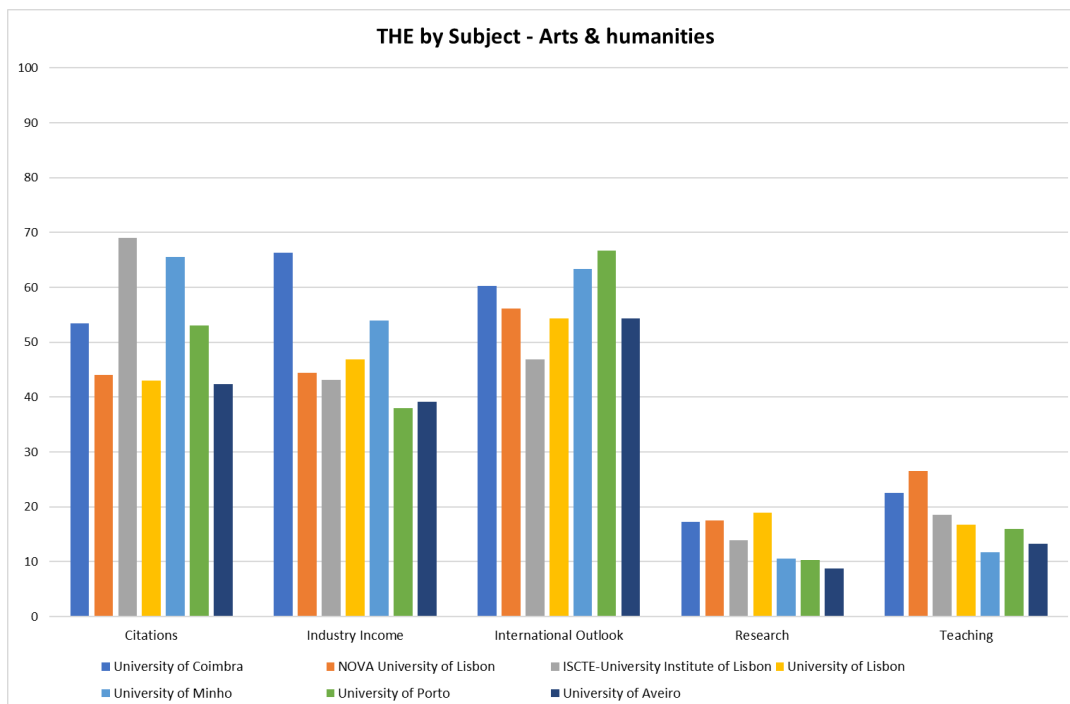
## 3.2 As Universidades portuguesas no THE WUR by subject 2022

### 3.2.1 Arts and humanities

	Mundo					Portugal				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
University of Coimbra	301-400	401+	301-400	301-400	251-300	3-5	5	3-6	3-6	1-2
NOVA University of Lisbon	251-300	201-250	201-250	251-300	251-300	1-2	1	1	1-2	1-2
ISCTE-University Institute of Lisbon	n/c	n/c	301-400	301-400	301-400			3-6	3-6	3-6
University of Lisbon	251-300	301-400	251-300	251-300	301-400	1-2	2-4	2	1-2	3-6
University of Minho	301-400	301-400	301-400	301-400	301-400	3-5	2-4	3-6	3-6	3-6
University of Porto	301-400	301-400	301-400	301-400	301-400	3-5	2-4	3-6	3-6	3-6
University of Aveiro	n/c	n/c	n/c	n/c	401-500					7
Nº de IES	401	506	536	565	606	5	5	6	6	7

n/c- não consta

	Overall	Citations	Industry Income	International Outlook	Research	Teaching
University of Coimbra	27,7–30,4	53,4	66,3	60,2	17,3	22,5
NOVA University of Lisbon	27,7–30,4	44,1	44,4	56,1	17,5	26,5
ISCTE-University Institute of Lisbon	22,9–27,6	69	43,1	46,9	13,9	18,5
University of Lisbon	22,9–27,6	43	46,9	54,4	18,9	16,7
University of Minho	22,9–27,6	65,5	54	63,4	10,6	11,7
University of Porto	22,9–27,6	53	38	66,7	10,3	16
University of Aveiro	18,6–22,8	42,4	39,2	54,4	8,8	13,3

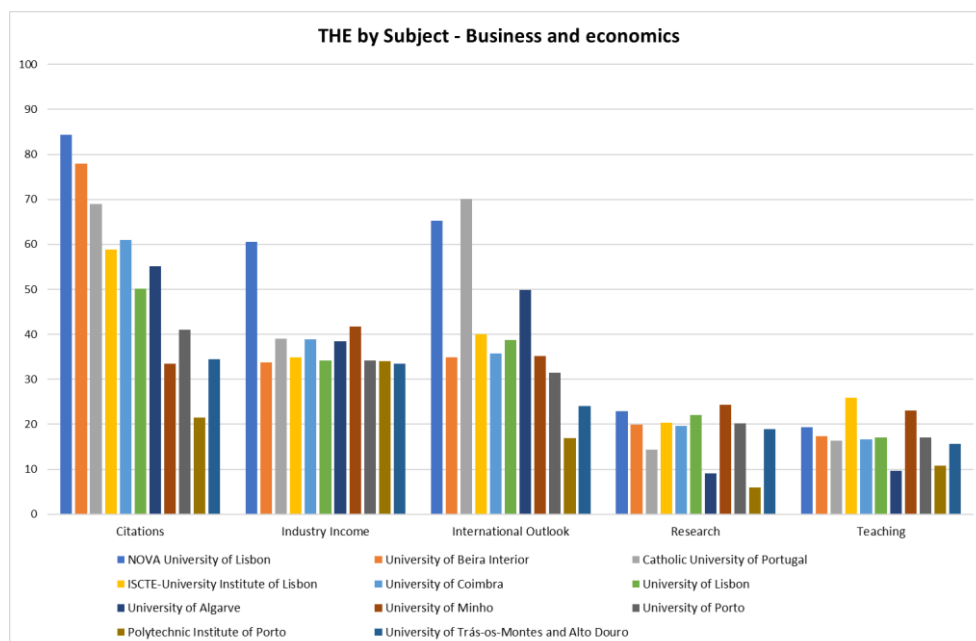


### 3.2.2 Business and economics

	Mundo					Portugal				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
NOVA University of Lisbon	151-175	176-200	151-175	151-175	176-200	1	1	1	1	1
University of Beira Interior	n/c	301-400	401-500	301-400	301-400		3	4-9	2-6	2-4
Catholic University of Portugal	n/c	n/c	301-400	301-400	301-400			2-3	2-6	2-4
ISCTE-University Institute of Lisbon	n/c	401-500	401-500	301-400	301-400		4-7	4-9	2-6	2-4
University of Coimbra	n/c	401-500	401-500	301-400	401-500		4-7	4-9	2-6	5-6
University of Lisbon	n/c	251-300	301-400	301-400	401-500		2	2-3	2-6	5-6
University of Algarve	n/c	n/c	401-500	501-600	501-600			4-9	8-9	7-9
University of Minho	n/c	401-500	401-500	401-500	501-600		4-7	4-9	7	7-9
University of Porto	n/c	401-500	401-500	501-600	501-600		4-7	4-9	8-9	7-9
Polytechnic Institute of Porto	n/c	n/c	n/c	601+	601+				10	10-11
University of Trás-os-Montes and Alto Douro	n/c	n/c	n/c	n/c	601+					10-11
Nº de IES	200	585	632	729	795	1	7	9	10	11

n/c- não consta

	Overall	Citations	Industry Income	International Outlook	Research	Teaching
NOVA University of Lisbon	41,6–43,2	84,4	60,6	65,3	22,9	19,3
University of Beira Interior	32,3–36,0	77,9	33,8	34,9	19,9	17,4
Catholic University of Portugal	32,3–36,0	69	39	70,1	14,4	16,3
ISCTE-University Institute of Lisbon	32,3–36,0	58,8	34,9	40	20,4	25,9
University of Coimbra	28,5–32,2	61	38,9	35,7	19,6	16,6
University of Lisbon	28,5–32,2	50,2	34,2	38,7	22	17
University of Algarve	25,1–28,4	55,2	38,5	49,8	9,1	9,6
University of Minho	25,1–28,4	33,4	41,7	35,2	24,4	23
University of Porto	25,1–28,4	41	34,2	31,4	20,2	17,1
Polytechnic Institute of Porto	9,2–25,0	21,5	34,1	16,9	5,9	10,8
University of Trás-os-Montes and Alto Douro	9,2–25,0	34,5	33,5	24,1	18,9	15,7

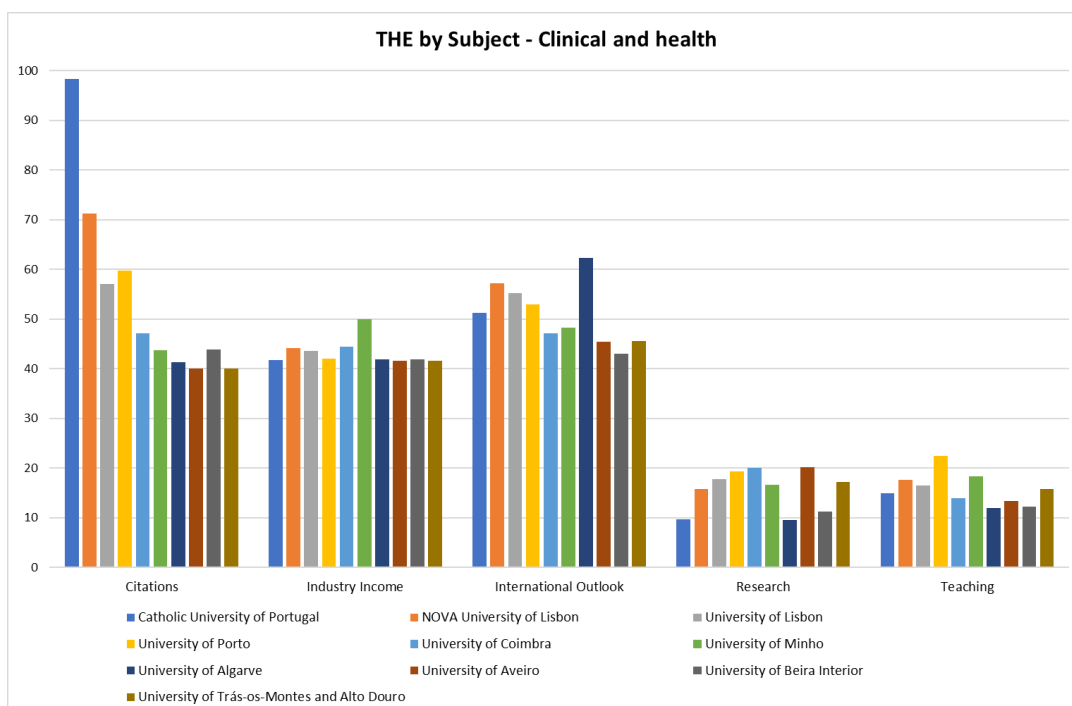


### 3.2.3 Clinical and health

	Mundo					Portugal				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
<b>Catholic University of Portugal</b>	n/c	n/c	n/c	151-175	151-175				1	1
<b>NOVA University of Lisbon</b>	401-500	401-500	501-600	201-250	251-300	4-7	2-5	5-6	2	2
<b>University of Lisbon</b>	401-500	401-500	301-400	301-400	301-400	4-7	2-5	2	4	3-4
<b>University of Porto</b>	251-300	251-300	251-300	251-300	301-400	1	1	1	3	3-4
<b>University of Coimbra</b>	301-400	401-500	401-500	501-600	501-600	2-3	2-5	3-4	5-6	5-6
<b>University of Minho</b>	301-400	401-500	401-500	501-600	501-600	2-3	2-5	3-4	5-6	5-6
<b>University of Algarve</b>	401-500	501-600	501-600	601+	601+	4-7	6-8	5-6	7-9	7-10
<b>University of Aveiro</b>	n/c	n/c	n/c	n/c	601+					7-10
<b>University of Beira Interior</b>	401-500	501-600	601+	601+	601+	4-7	6-8	7-8	7-9	7-10
<b>University of Trás-os-Montes and Alto Douro</b>	n/c	501-600	601+	601+	601+		6-8	7-8	7-9	7-10
<b>Nº de IES</b>	501	721	775	856	925	7	8	8	9	10

n/c- não consta

	Overall	Citations	Industry Income	International Outlook	Research	Teaching
<b>Catholic University of Portugal</b>	45,1–46,5	98,3	41,7	51,2	9,7	14,9
<b>NOVA University of Lisbon</b>	39,1–41,4	71,2	44,1	57,2	15,8	17,7
<b>University of Lisbon</b>	34,4–38,9	57	43,6	55,2	17,8	16,5
<b>University of Porto</b>	34,4–38,9	59,8	42,1	53	19,3	22,4
<b>University of Coimbra</b>	28,4–31,2	47,2	44,5	47,1	20,1	14
<b>University of Minho</b>	28,4–31,2	43,7	50	48,3	16,6	18,3
<b>University of Algarve</b>	17,3–28,3	41,3	41,9	62,3	9,6	11,9
<b>University of Aveiro</b>	17,3–28,3	40,1	41,6	45,5	20,2	13,4
<b>University of Beira Interior</b>	17,3–28,3	43,9	41,9	43	11,2	12,2
<b>University of Trás-os-Montes and Alto Douro</b>	17,3–28,3	40,1	41,6	45,6	17,2	15,8

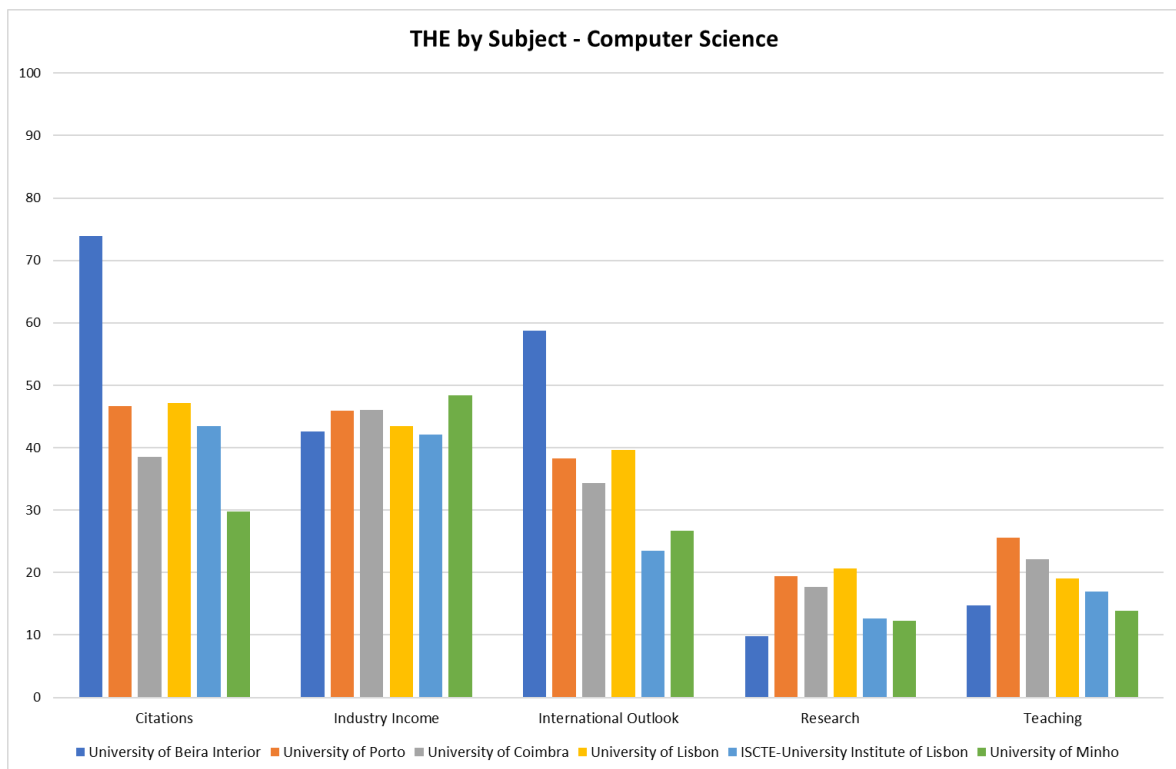


### 3.2.4 Computer science

	Mundo					Portugal				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
<b>University of Beira Interior</b>	201-250	251-300	301-400	301-400	401-500	1	1	1	1	1-2
<b>University of Porto</b>	n/c	401-500	401-500	401-500	401-500		3-4	2-4	2-4	1-2
<b>University of Coimbra</b>	251-300	301-400	401-500	401-500	501-600	2	2	2-4	2-4	3-4
<b>University of Lisbon</b>	n/c	401-500	401-500	401-500	501-600		3-4	2-4	2-4	3-4
<b>ISCTE-University Institute of Lisbon</b>	n/c	501-600	601+	501-600	601-800		5-6	5-6	5	5-6
<b>University of Minho</b>	n/c	501-600	601+	601-800	601-800		5-6	5-6	6	5-6
<b>Nº de IES</b>	302	684	749	827	891	2	6	6	6	6

n/c- não consta

	Overall	Citations	Industry Income	International Outlook	Research	Teaching
<b>University of Beira Interior</b>	31,0-34,8	73,9	42,6	58,8	9,8	14,7
<b>University of Porto</b>	31,0-34,8	46,7	45,9	38,3	19,4	25,6
<b>University of Coimbra</b>	26,5-30,8	38,5	46	34,4	17,7	22,1
<b>University of Lisbon</b>	26,5-30,8	47,2	43,5	39,7	20,7	19
<b>ISCTE-University Institute of Lisbon</b>	19,0-26,4	43,4	42,1	23,5	12,7	16,9
<b>University of Minho</b>	19,0-26,4	29,8	48,4	26,7	12,3	13,9



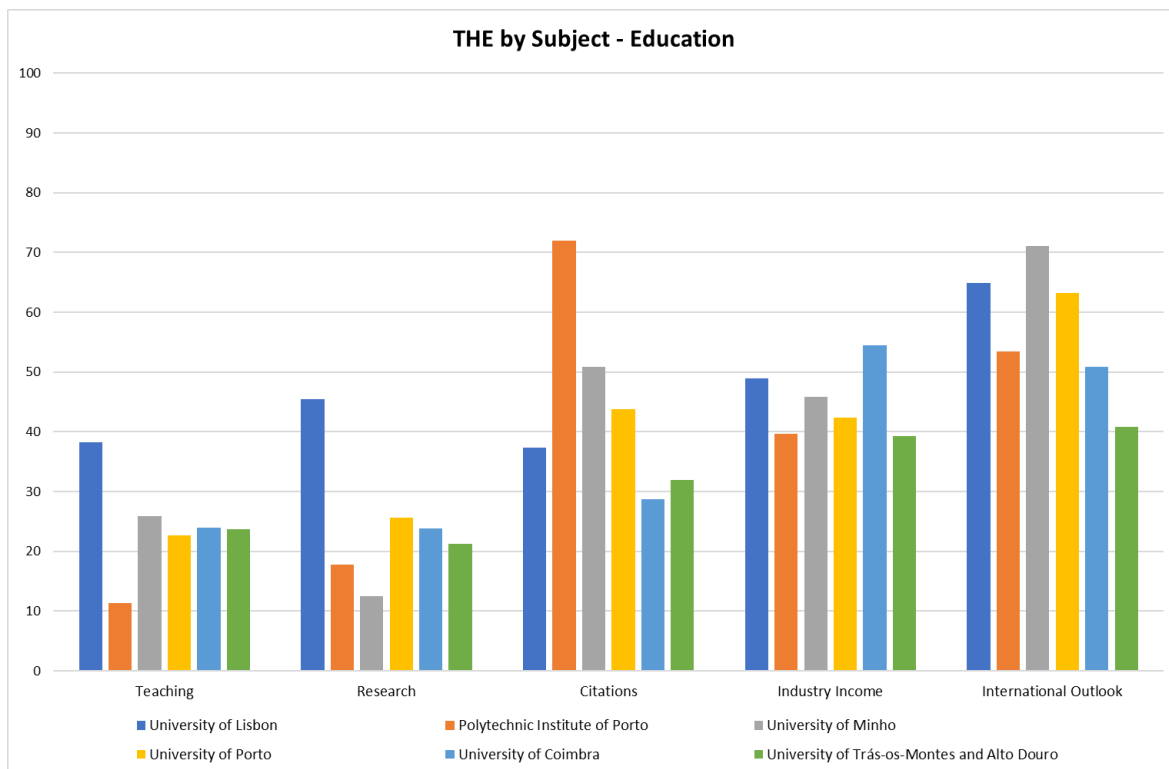
### 3.2.5 Education

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

	Mundo				Portugal			
	2018	2019	2020	2021	2018	2019	2020	2021
<b>University of Lisbon</b>	176-200	151-175	126-150	151-175	2	1	1	1
<b>Polytechnic Institute of Porto</b>	n/c	201-250	301-400	251-300		4-5	5-6	2
<b>University of Minho</b>	201-250	201-250	301-400	301-400	3-4	4-5	5-6	3-4
<b>University of Porto</b>	126-150	176-200	251-300	301-400	1	2-3	4	3-4
<b>University of Coimbra</b>	201-250	176-200	201-250	401-500	3-4	2-3	3	5-6
<b>University of Trás-os-Montes and Alto Douro</b>	n/c	n/c	401-500	401-500			7	5-6
<b>NOVA University of Lisbon</b>	301-400	251-300	176-200	n/c	5	6	2	
<b>Nº de IES</b>	428	477	537	597	5	6	7	6

n/c- não consta

	Overall	Teaching	Research	Citations	Industry Income	International Outlook
<b>University of Lisbon</b>	41,7–44,2	38,3	45,5	37,3	48,9	64,9
<b>Polytechnic Institute of Porto</b>	33,7–36,1	11,3	17,8	72	39,6	53,5
<b>University of Minho</b>	28,6–33,6	25,9	12,5	50,8	45,9	71,1
<b>University of Porto</b>	28,6–33,6	22,7	25,6	43,8	42,4	63,2
<b>University of Coimbra</b>	23,3–28,5	23,9	23,8	28,7	54,5	50,8
<b>University of Trás-os-Montes and Alto Douro</b>	23,3–28,5	23,7	21,2	31,9	39,3	40,8



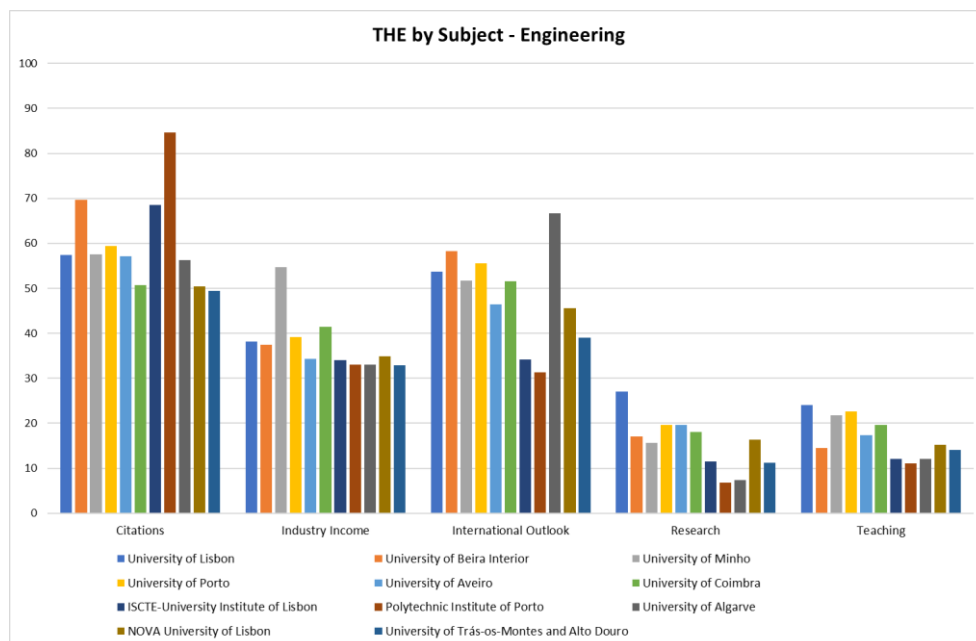


### 3.2.6 Engineering

	Mundo					Portugal				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
University of Lisbon	301-400	301-400	401-500	401-500	301-400	2-6	1-2	3-5	3-4	1
University of Beira Interior	251-300	301-400	301-400	301-400	401-500	1	1-2	1-2	1-2	2-4
University of Minho	301-400	401-500	401-500	501-600	401-500	2-6	3-7	3-5	5-7	2-4
University of Porto	301-400	401-500	301-400	301-400	401-500	2-6	3-7	1-2	1-2	2-4
University of Aveiro	301-400	401-500	401-500	401-500	501-600	2-6	3-7	3-5	3-4	5-8
University of Coimbra	301-400	401-500	501-600	501-600	501-600	2-6	3-7	6-8	5-7	5-8
ISCTE-University Institute of Lisbon	n/c	n/c	n/c	n/c	501-600					5-8
Polytechnic Institute of Porto	n/c	401-500	501-600	601-800	501-600		3-7	6-8	8-9	5-8
University of Algarve	n/c	n/c	n/c	n/c	601-800					9-11
NOVA University of Lisbon	401-500	501-600	501-600	501-600	601-800	7	8	6-8	5-7	9-11
University of Trás-os-Montes and Alto Douro	n/c	601-800	601-800	601-800	601-800		9	9	8-9	9-11
Nº de IES	501	903	1008	1098	1188	7	9	9	9	11

n/c- não consta

	Overall	Citations	Industry Income	International Outlook	Research	Teaching
University of Lisbon	36,1–39,4	57,4	38,2	53,7	27,1	24
University of Beira Interior	33,0–36,0	69,7	37,5	58,3	17	14,5
University of Minho	33,0–36,0	57,5	54,7	51,7	15,7	21,7
University of Porto	33,0–36,0	59,4	39,2	55,5	19,7	22,6
University of Aveiro	29,9–32,9	57,2	34,3	46,4	19,7	17,4
University of Coimbra	29,9–32,9	50,7	41,5	51,6	18,1	19,6
ISCTE-University Institute of Lisbon	29,9–32,9	68,5	34,1	34,2	11,5	12,1
Polytechnic Institute of Porto	29,9–32,9	84,6	33	31,3	6,8	11,1
University of Algarve	23,7–29,8	56,3	33,1	66,7	7,3	12,1
NOVA University of Lisbon	23,7–29,8	50,4	34,9	45,6	16,4	15,2
University of Trás-os-Montes and Alto Douro	23,7–29,8	49,4	32,9	39	11,2	14,1



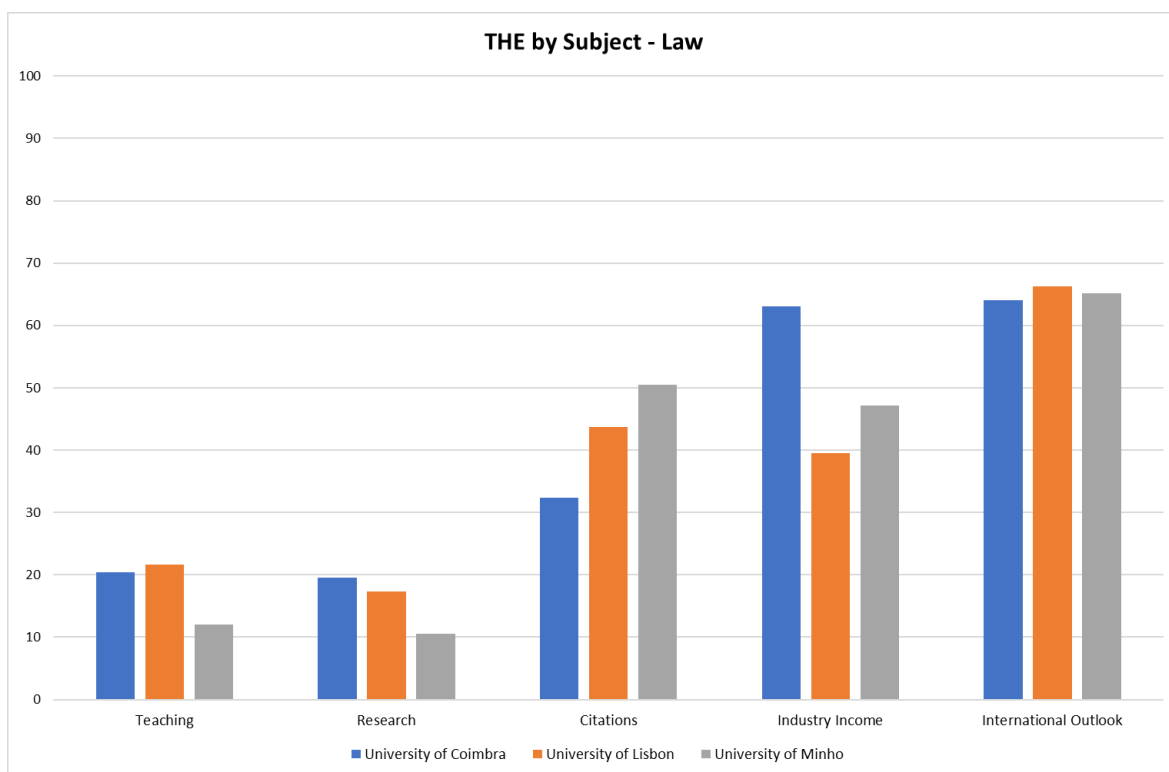
### 3.2.7 Law

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

	Mundo				Portugal			
	2018	2019	2020	2021	2018	2019	2020	2021
University of Coimbra	151+	151+	176-200	176-200	1	2	2	1-2
University of Lisbon	n/c	126-150	126-150	176-200		1	1	1-2
University of Minho	n/c	n/c	n/c	201+				3
Nº de IES	187	190	224	257	1	2	2	3

n/c- não consta

	Overall	Teaching	Research	Citations	Industry Income	International Outlook
University of Coimbra	28,0-30,8	20,4	19,5	32,4	63,1	64,1
University of Lisbon	28,0-30,8	21,6	17,3	43,7	39,5	66,3
University of Minho	11,8-27,7	12	10,6	50,5	47,1	65,1

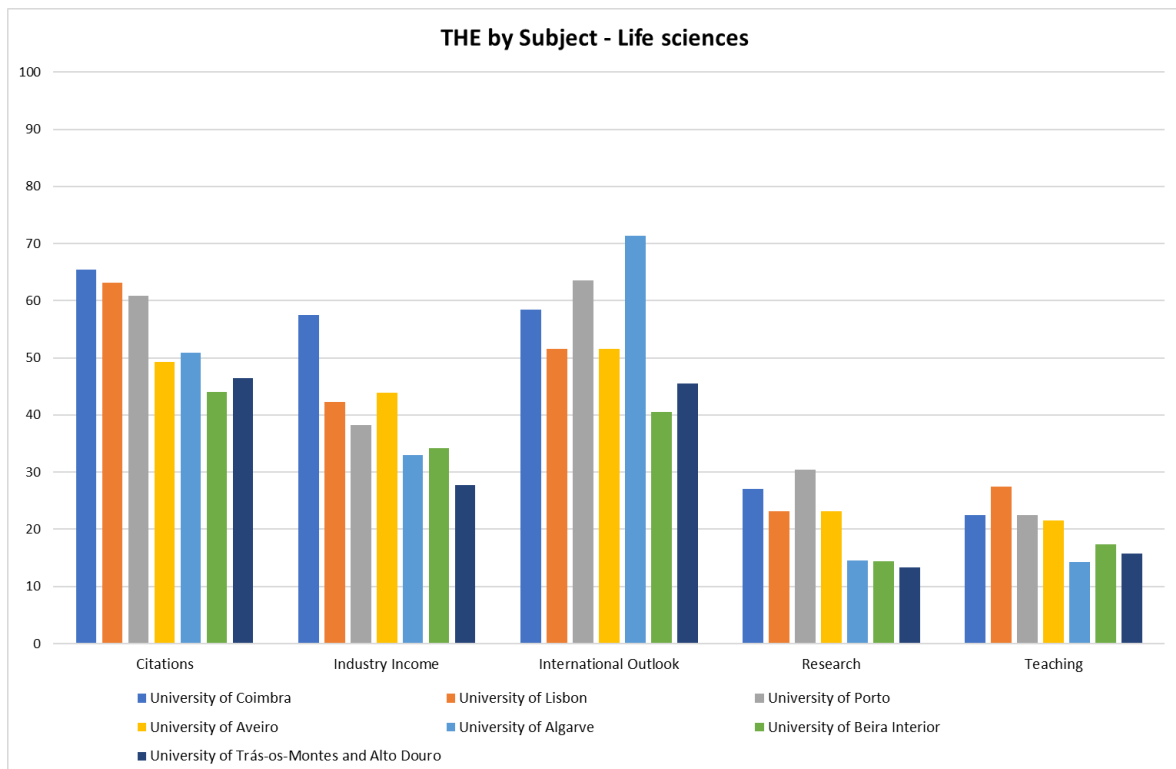


### 3.2.8 Life sciences

	Mundo					Portugal				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
University of Coimbra	251-300	301-400	301-400	301-400	301-400	1	1-4	1-3	1-3	1-3
University of Lisbon	301-400	301-400	301-400	301-400	301-400	2-4	1-4	1-3	1-3	1-3
University of Porto	301-400	301-400	301-400	301-400	301-400	2-4	1-4	1-3	1-3	1-3
University of Aveiro	301-400	301-400	401-500	401-500	401-500	2-4	1-4	4-6	4	4
University of Algarve	401-500	401-500	401-500	501-600	501-600	5	5-6	4-6	5-7	5
University of Beira Interior	n/c	601+	601+	501-600	601-800		8	8	5-7	6-7
University of Trás-os-Montes and Alto Douro	n/c	501-600	501-600	501-600	601-800		7	7	5-7	6-7
University of Évora	n/c	401-500	401-500	n/c	n/c		5-6	4-6		
Nº de IES	502	751	821	895	972	5	8	8	7	7

n/c- não consta

	Overall	Citations	Industry Income	International Outlook	Research	Teaching
University of Coimbra	38,5–43,7	65,4	57,5	58,5	27,1	22,5
University of Lisbon	38,5–43,7	63,1	42,3	51,6	23,1	27,4
University of Porto	38,5–43,7	60,8	38,3	63,6	30,4	22,5
University of Aveiro	33,6–38,3	49,3	43,9	51,6	23,2	21,5
University of Algarve	28,5–33,5	50,9	33	71,4	14,6	14,3
University of Beira Interior	19,2–28,4	44	34,2	40,5	14,4	17,4
University of Trás-os-Montes and Alto Douro	19,2–28,4	46,5	27,8	45,5	13,3	15,7

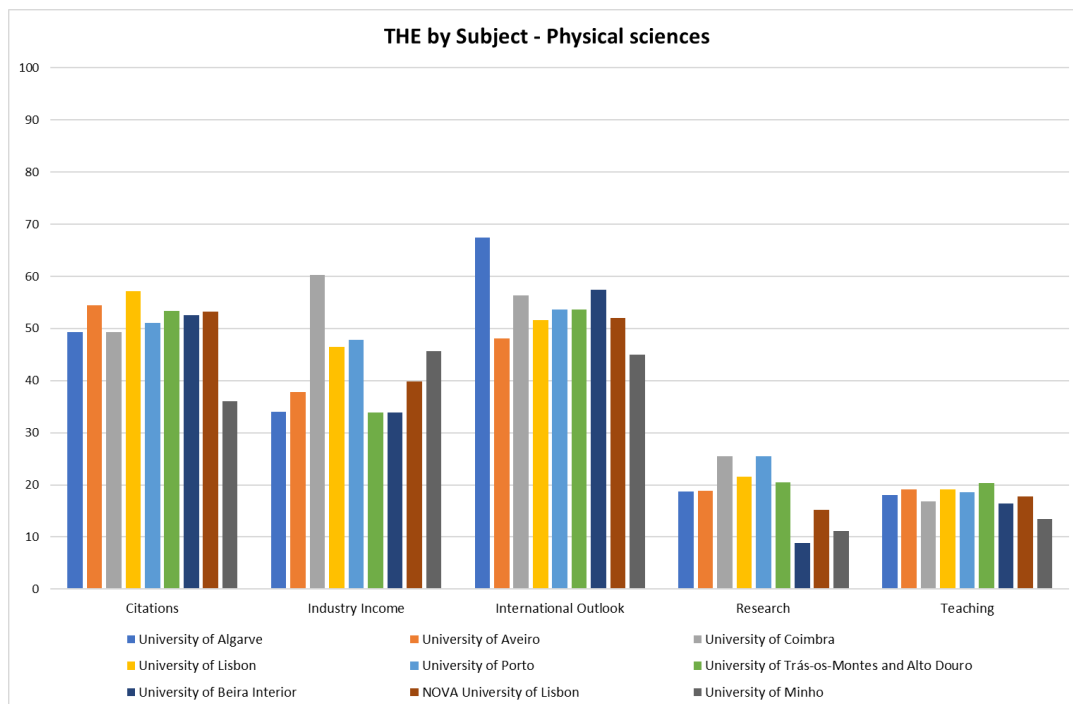


### 3.2.9 Physical sciences

	Mundo					Portugal				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
University of Algarve	n/c	n/c	n/c	501-600	501-600				1-6	1-6
University of Aveiro	401-500	401-500	501-600	501-600	501-600	1-5	1-4	3-5	1-6	1-6
University of Coimbra	401-500	401-500	501-600	501-600	501-600	1-5	1-4	3-5	1-6	1-6
University of Lisbon	401-500	401-500	401-500	501-600	501-600	1-5	1-4	1-2	1-6	1-6
University of Porto	401-500	401-500	401-500	501-600	501-600	1-5	1-4	1-2	1-6	1-6
University of Trás-os-Montes and Alto Douro	n/c	501-600	601-800	601-800	501-600		5-6	6-9	7-9	1-6
University of Beira Interior	n/c	601-800	601-800	601-800	601-800		7-9	6-9	7-9	7-8
NOVA University of Lisbon	401-500	501-600	501-600	501-600	601-800	1-5	5-6	3-5	1-6	7-8
University of Minho	n/c	601-800	601-800	601-800	801-1000		7-9	6-9	7-9	9
University of Évora	n/c	601-800	601-800	n/c	n/c		7-9	6-9		
Nº de IES	501	963	1054	1149	1227	5	9	9	9	9

n/c- não consta

	Overall	Citations	Industry Income	International Outlook	Research	Teaching
University of Algarve	33,0–36,5	49,3	34	67,5	18,7	18,1
University of Aveiro	33,0–36,5	54,5	37,8	48,1	18,9	19,1
University of Coimbra	33,0–36,5	49,3	60,2	56,4	25,5	16,8
University of Lisbon	33,0–36,5	57,2	46,5	51,6	21,6	19,1
University of Porto	33,0–36,5	51,1	47,8	53,6	25,5	18,6
University of Trás-os-Montes and Alto Douro	33,0–36,5	53,4	33,9	53,6	20,5	20,4
University of Beira Interior	25,0–32,9	52,5	33,9	57,4	8,9	16,4
NOVA University of Lisbon	25,0–32,9	53,2	39,8	52	15,2	17,8
University of Minho	17,8–24,9	36,1	45,7	45	11,1	13,4



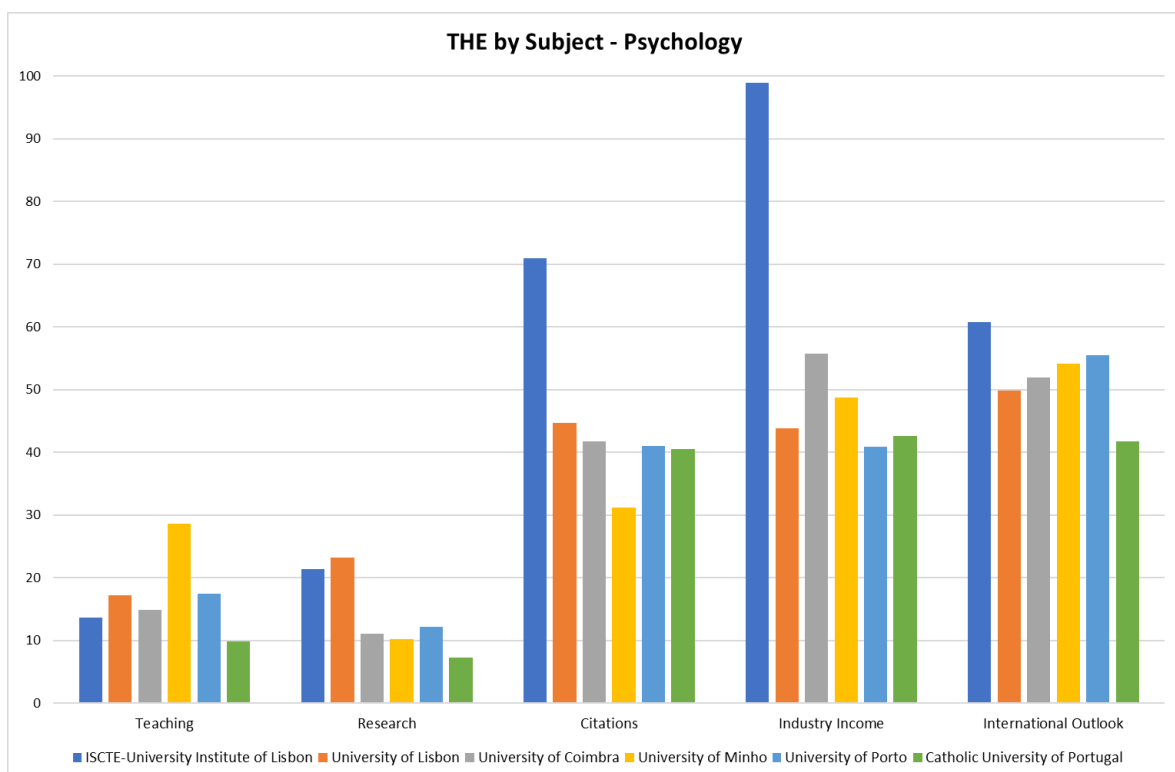
### 3.2.10 Psychology

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

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

n/c- não consta

	Overall	Teaching	Research	Citations	Industry Income	International Outlook
<b>ISCTE-University Institute of Lisbon</b>	40,7-42,8	13,6	21,4	70,9	99	60,8
<b>University of Lisbon</b>	29,7-35,2	17,2	23,2	44,7	43,8	49,8
<b>University of Coimbra</b>	24,2-29,6	14,9	11,1	41,8	55,7	51,9
<b>University of Minho</b>	24,2-29,6	28,6	10,2	31,2	48,8	54,2
<b>University of Porto</b>	24,2-29,6	17,5	12,2	41	40,9	55,5
<b>Catholic University of Portugal</b>	12,4-24,1	9,8	7,3	40,5	42,6	41,8

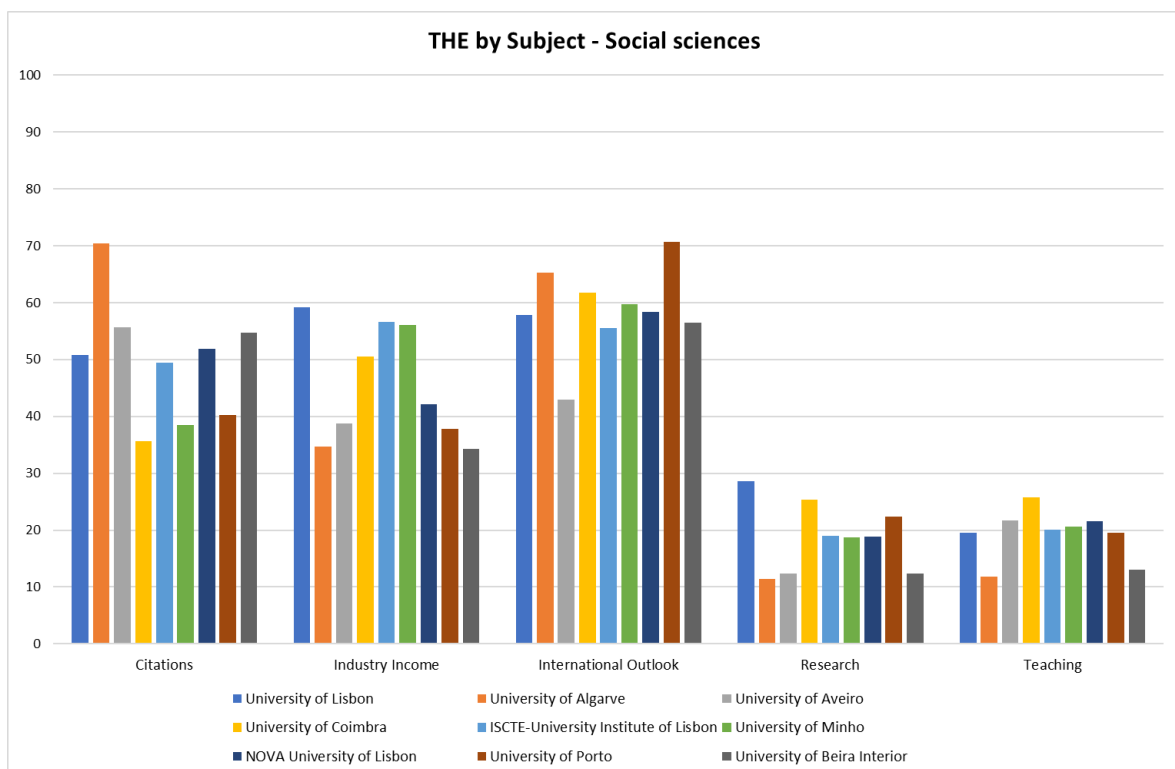


### 3.2.11 Social sciences

	Mundo					Portugal				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
University of Lisbon	201-250	201-250	301-400	301-400	301-400	1	1	1-4	2-4	1
University of Algarve	n/c	n/c	301-400	301-400	401-500			1-4	2-4	2-8
University of Aveiro	301-400	301-400	401-500	401-500	401-500	3-5	2-5	5-7	5-9	2-8
University of Coimbra	251-300	301-400	301-400	251-300	401-500	2	2-5	1-4	1	2-8
ISCTE-University Institute of Lisbon	n/c	401-500	401-500	401-500	401-500		6	5-7	5-9	2-8
University of Minho	n/c	501-600	501-600	401-500	401-500		7-8	8-9	5-9	2-8
NOVA University of Lisbon	301-400	301-400	301-400	301-400	401-500	3-5	2-5	1-4	2-4	2-8
University of Porto	301-400	301-400	401-500	401-500	401-500	3-5	2-5	5-7	5-9	2-8
University of Beira Interior	n/c	501-600	501-600	401-500	501-600		7-8	8-9	5-9	9
Nº de IES	400	666	720	791	870	5	8	9	9	9

n/c- não consta

	Overall	Citations	Industry Income	International Outlook	Research	Teaching
University of Lisbon	32,2–35,7	50,8	59,2	57,8	28,6	19,5
University of Algarve	28,2–32,1	70,4	34,7	65,3	11,4	11,8
University of Aveiro	28,2–32,1	55,6	38,8	43	12,4	21,7
University of Coimbra	28,2–32,1	35,6	50,5	61,8	25,4	25,8
ISCTE-University Institute of Lisbon	28,2–32,1	49,5	56,6	55,5	19	20,1
University of Minho	28,2–32,1	38,5	56,1	59,7	18,7	20,6
NOVA University of Lisbon	28,2–32,1	51,9	42,1	58,4	18,8	21,6
University of Porto	28,2–32,1	40,3	37,8	70,7	22,4	19,5
University of Beira Interior	24,4–28,1	54,7	34,3	56,5	12,4	13,1



## Anexo - Metodologia do THE WUR 2022 by subject

### Arts and humanities

"The *Times Higher Education* World University Rankings 2022 arts and humanities subject ranking includes a range of narrower subject areas.

**The subjects used to create this ranking are:**

- Art, performing arts and design
- Languages, literature and linguistics
- History, philosophy and theology
- Architecture
- Archaeology

### Different weights and measures

The subject tables employ the same range of 13 performance indicators used in the overall World University Rankings 2022, 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.

**The weightings for the arts and humanities ranking are:**

- **Teaching: the learning environment**  
37.4 per cent
- **Research: volume, income and reputation**  
37.6 per cent
- **Citations: research influence**  
15 per cent
- **International outlook: staff, students and research**  
7.5 per cent
- **Industry income: innovation**  
2.5 per cent

### Criteria

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

No institution can be included in the overall World University Rankings unless it has published a minimum of 1,000 relevant publications over the five years that we examine.

For the 11 subject tables, the publication thresholds are set differently. For arts and humanities, the threshold drops to 250 papers published in this discipline over the past five years.

There is also an academic staff criterion. Prior to the 2019 subject rankings, we expected an institution to have at least 5 per cent of its academic staff members working in the arts and humanities discipline in order to include it in the subject table.

Since the 2019 subject rankings, we have made a small adjustment to the staff eligibility criterion. An institution needs a minimum proportion or number of staff in this discipline to be included in the subject ranking.

For arts and humanities, we expect an institution to have at least 5 per cent of its academic staff or at least 50 academic staff members in the discipline.

*\*Academic staff is defined as the full-time equivalent number of staff members employed in an academic post, for example, lecturer, reader, professor."*<sup>19</sup>

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<sup>19</sup> In <https://www.timeshighereducation.com/world-university-rankings-2022-subject-arts-and-humanities-methodology> acedido 20211103

## Business and economics

"The *Times Higher Education* World University Rankings 2022 business and economics subject ranking includes a range of narrower subject areas.

**The subjects used to create this ranking are:**

- Business and management
- Accounting and finance
- Economics and econometrics

### Different weights and measures

The subject tables employ the same range of 13 performance indicators used in the overall World University Rankings 2022, 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.

**The weightings for the business and economics ranking are:**

- **Teaching: the learning environment**  
30.9 per cent
- **Research: volume, income and reputation**  
32.6 per cent
- **Citations: research influence**  
25 per cent
- **International outlook: staff, students and research**  
9 per cent
- **Industry income: innovation**  
2.5 per cent

### Criteria

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

No institution can be included in the overall World University Rankings unless it has published a minimum of 1,000 relevant publications over the five years that we examine.

For each of the 11 subject rankings, the publication thresholds are different. For business and economics, the threshold drops to 200 papers published in this discipline over the past five years.

There is also an academic staff eligibility criterion. Prior to the 2019 subject rankings, we expected an institution to have at least 5 per cent of its academic staff members working in business and economics in order to include it in the subject table.

Since the 2019 subject rankings, we have made a small adjustment to the staff eligibility criterion. An institution needs to have either a minimum proportion of its staff or a minimum number of staff in this discipline to be included in the subject ranking.

For business and economics, we expect an institution either to have at least 5 per cent of its academic staff in the discipline or to have at least 50 academic staff in the discipline.

*\*Academic staff is defined as the full-time equivalent number of staff employed in an academic post, for example lecturer, reader or professor."*<sup>20</sup>

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<sup>20</sup> In <https://www.timeshighereducation.com/world-university-rankings-2022-subject-business-and-economics-methodology> acedido 20211013



## Computer science

### “Different weights and measures

The subject tables employ the same range of 13 performance indicators used in the overall World University Rankings 2022, 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.

**The weightings for the computer science ranking are:**

- **Teaching: the learning environment**  
30 per cent
- **Research: volume, income and reputation**  
30 per cent
- **Citations: research influence**  
27.5 per cent
- **International outlook: staff, students and research**  
7.5 per cent
- **Industry income: innovation**  
5 per cent

### Criteria

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

No institution can be included in the overall World University Rankings unless it has published a minimum of 1,000 research papers over the five years that we examine.

For the 11 subject rankings, the publication thresholds are different. For computer science, the threshold drops to 500 papers published in this discipline over the past five years.

There is also an academic staff eligibility criterion. Prior to the 2019 subject rankings, we expected an institution to have at least 1 per cent of its academic staff working in the computer science discipline in order to include it in the subject table.

Since the 2019 subject rankings, we have made a small adjustment in the staff eligibility criterion. An institution needs to have either a minimum proportion of its staff or a minimum number of staff in this discipline in order to be included in the subject ranking.

For computer science, we expect an institution to have either at least 1 per cent of its academic staff in the computer science discipline or at least 20 academic staff in the computer science discipline.

*\*Academic staff is defined as the full-time equivalent number of staff employed in an academic post, for example, lecturer, reader or professor.”<sup>21</sup>*

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<sup>21</sup>In <https://www.timeshighereducation.com/world-university-rankings-2022-subject-computer-science-methodology>  
acedido 20211006

## Clinical and health

"The *Times Higher Education* World University Rankings 2022 clinical and health subject ranking includes a range of narrower subject areas.

**The subjects used to create this ranking are:**

- Medicine and dentistry
- Other health

## Different weights and measures

The subject tables employ the same range of 13 performance indicators used in the overall World University Rankings 2022, 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.

**The weightings for the clinical and health ranking are:**

- **Teaching: the learning environment**  
27.5 per cent
- **Research: volume, income and reputation**  
27.5 per cent
- **Citations: research influence**  
35 per cent
- **International outlook: staff, students and research**  
7.5 per cent
- **Industry income: innovation**  
2.5 per cent

## Criteria

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

No institution can be included in the overall World University Rankings unless it has published at least 1,000 relevant publications over the five years that we examine.

For the 11 subject tables, the publication thresholds are set differently. For clinical and health, the threshold drops to 500 papers published in this discipline over the past five years.

There is also an academic staff eligibility criterion. Prior to the 2019 subject rankings, an institution had to have at least 5 per cent of its academic staff working in the clinical, pre-clinical and health discipline to be included in the subject table.

Since the 2019 subject rankings, we have made a small adjustment in the staff eligibility criterion. An institution needs to have either a minimum proportion of its staff or a minimum number of staff in this discipline to be included in the subject ranking.

For clinical and health, an institution must have at least 5 per cent of its academic staff or at least 50 academic staff members in the discipline.

*\*Academic staff is defined as the full-time equivalent number of staff employed in an academic post, for example lecturer, reader, professor.<sup>22</sup>*

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<sup>22</sup> In <https://www.timeshighereducation.com/world-university-rankings-2022-subject-clinical-and-health-methodology>  
acedido 20210916

## Education

"The *Times Higher Education* World University Rankings 2022 education subject ranking includes a range of narrower subject areas.

**The subjects used to create this ranking are:**

- Education
- Teacher training
- Academic studies in education

### Different weights and measures

The subject tables employ the same range of 13 performance indicators used in the overall World University Rankings 2022, 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.

**The weightings for the education ranking are:**

- **Teaching: the learning environment**  
32.7 per cent
- **Research: volume, income and reputation**  
29.8 per cent
- **Citations: research influence**  
27.5 per cent
- **International outlook: staff, students and research**  
7.5 per cent
- **Industry income: innovation**  
2.5 per cent

### Criteria

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

No institution can be included in the overall World University Rankings unless it has published a minimum of 1,000 relevant publications over the five years that we examine.

For each of the 11 subject rankings, the publication thresholds are different. For education, the threshold drops to 100 papers published in this discipline over the past five years.

There is also an academic staff eligibility criterion. Prior to the 2019 subject rankings, we expected an institution to have at least 1 per cent of its academic staff working in education in order to include it in the subject table.

Since the 2019 subject rankings, we have made a small adjustment to the staff eligibility criterion. An institution needs to have either a minimum proportion of its staff or a minimum number of staff in this discipline to be included in the subject ranking.

For education, we expect an institution to have either at least 1 per cent of its academic staff in education or at least 20 academic staff in education.

*\*Academic staff is defined as the full-time equivalent number of staff members employed in an academic post, for example, lecturer, reader or professor."*<sup>23</sup>

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<sup>23</sup> In <https://www.timeshighereducation.com/world-university-rankings-2022-subject-education-methodology> accessed 20211013

## Engineering

"The *Times Higher Education* World University Rankings 2022 engineering subject ranking includes a range of narrower subject areas.

**The subjects used to create this ranking are:**

- General engineering
- Electrical and electronic engineering
- Mechanical and aerospace engineering
- Civil engineering
- Chemical engineering

### Different weights and measures

The subject tables employ the same range of 13 performance indicators used in the overall World University Rankings 2022, 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.

**The weightings for the engineering ranking are:**

- **Teaching: the learning environment**  
30 per cent
- **Research: volume, income and reputation**  
30 per cent
- **Citations: research influence**  
27.5 per cent
- **International outlook: staff, students and research**  
7.5 per cent
- **Industry income: innovation**  
5 per cent

### Criteria

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

No institution can be included in the overall World University Rankings unless it has published a minimum of 1,000 research papers over the five years that we examine.

For the 11 subject rankings, the publication thresholds are different. For engineering, the threshold drops to 500 papers published in this discipline over the past five years.

There is also an academic staff eligibility criterion. Prior to the 2019 subject rankings, we expected an institution to have at least 4 per cent of its academic staff members working in the engineering discipline in order to include it in the subject table.

Since the 2019 subject rankings, we have made a small adjustment in the staff eligibility criterion. An institution needs to have either a minimum proportion of staff or a minimum number of staff in this discipline to be included in the subject ranking.

For engineering, we expect an institution to have either at least 4 per cent of its academic staff members in the engineering discipline or at least 40 academic staff members in the engineering discipline.

*\*Academic staff is defined as the full-time equivalent number of staff employed in an academic post, eg, lecturer, reader or professor."*<sup>24</sup>

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<sup>24</sup> In <https://www.timeshighereducation.com/world-university-rankings-2022-subject-engineering-methodology> accessed 20211006

## Law

### "Different weights and measures

The subject tables employ the same range of 13 performance indicators used in the overall World University Rankings 2022, 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.

### The weightings for the law ranking are:

- **Teaching: the learning environment**  
32.7 per cent
- **Research: volume, income and reputation**  
30.8 per cent
- **Citations: research influence**  
25 per cent
- **International outlook: staff, students and research**  
9 per cent
- **Industry income: innovation**  
2.5 per cent

### Criteria

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

No institution can be included in the overall World University Rankings unless it has published a minimum of 1,000 relevant publications over the five years that we examine.

For each of the 11 subject rankings, the publication thresholds are different. For law, the threshold drops to 100 papers published in this discipline over the past five years.

There is also an academic staff eligibility criterion. Prior to the 2019 subject rankings, we expected an institution to have at least 1 per cent of its academic staff working in the law discipline in order to include it in the subject table.

Since the 2019 subject rankings, we have made a small adjustment to the staff eligibility criterion. An institution needs to have either a minimum proportion of its staff or a minimum number of staff in this discipline in order to be included in the subject ranking.

For law, we expect an institution to have either at least 1 per cent of its academic staff in the discipline or at least 20 academic staff in the discipline.

*\*Academic staff is defined as the full-time equivalent number of staff members employed in an academic post, for example, lecturer, reader or professor.*<sup>25</sup>

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<sup>25</sup> In <https://www.timeshighereducation.com/world-university-rankings-2022-subject-law-methodology>  
accedido 20211013

## Life sciences

"The *Times Higher Education* World University Rankings 2022 life sciences subject ranking includes a range of narrower subject areas.

**The subjects used to create this ranking are:**

- Agriculture and forestry
- Biological sciences
- Veterinary science
- Sport science

### Different weights and measures

The subject tables employ the same range of 13 performance indicators used in the overall World University Rankings 2022, 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.

**The weightings for the life sciences ranking are:**

- **Teaching: the learning environment**  
27.5 per cent
- **Research: volume, income and reputation**  
27.5 per cent
- **Citations: research influence**  
35 per cent
- **International outlook: staff, students and research**  
7.5 per cent
- **Industry income: innovation**  
2.5 per cent

### Criteria

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

No institution can be included in the overall World University Rankings unless it has published a minimum of 1,000 relevant publications over the five years that we examine.

For the 11 subject tables, the publication thresholds are set differently. For life sciences, the threshold drops to 500 papers published in this discipline over the past five years.

There is also an academic staff eligibility criterion. Prior to the 2019 subject rankings, we expected an institution to have at least 5 per cent of its academic staff working in the life sciences discipline in order to include it in the subject table.

Since the 2019 subject rankings, we have made a small adjustment in the staff eligibility criterion. An institution needs to have either a minimum proportion of its staff or a minimum number of staff in this discipline to be included in the subject ranking.

For life sciences, we expect an institution to have either at least 5 per cent of its academic staff in the life sciences discipline or at least 50 academic staff in the life sciences discipline.

*\*Academic staff is defined as the full-time equivalent number of staff employed in an academic post, for example, lecturer, reader or professor."*<sup>26</sup>

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<sup>26</sup> In <https://www.timeshighereducation.com/world-university-rankings-2022-subject-life-sciences-methodology> accessed 20210916

## Physical sciences

"The *Times Higher Education* World University Rankings 2022 physical sciences subject ranking includes a range of narrower subject areas.

**The subjects used to create this ranking are:**

- Mathematics and statistics
- Physics and astronomy
- Chemistry
- Geology, environmental, earth and marine sciences

## Different weights and measures

The subject tables employ the same range of 13 performance indicators used in the overall World University Rankings 2022, 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.

**The weightings for the physical sciences ranking are:**

- **Teaching: the learning environment**  
27.5 per cent
- **Research: volume, income and reputation**  
27.5 per cent
- **Citations: research influence**  
35 per cent
- **International outlook: staff, students and research**  
7.5 per cent
- **Industry income: innovation**  
2.5 per cent

## Criteria

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

No institution can be included in the overall World University Rankings unless it has published a minimum of 1,000 relevant publications over the five years that we examine.

For the 11 subject tables, the publication thresholds are set differently. For physical sciences, the threshold drops to 500 papers published in this discipline over the past five years.

There is also an academic staff eligibility criterion. Prior to the 2019 subject rankings, we expected an institution to have at least 5 per cent of its academic staff working in the physical sciences discipline in order to include it in the subject table.

Since the 2019 subject rankings, we have made a small adjustment in the staff eligibility criterion. An institution needs to have either a minimum proportion of its staff or a minimum number of staff in this discipline to be included in the subject ranking.

For physical sciences, we expect an institution to have either at least 5 per cent of its academic staff in the physical sciences discipline or at least 50 academic staff in the physical sciences discipline.

*\*Academic staff is defined as the full-time equivalent number of staff employed in an academic post, for example, lecturer, reader or professor,<sup>27</sup>*

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<sup>27</sup> In <https://www.timeshighereducation.com/world-university-rankings-2022-subject-physical-sciences-methodology>  
accedido 20210916

## Psychology

"The *Times Higher Education* World University Rankings 2022 psychology subject ranking includes a range of narrower subject areas.

**The subjects used to create this ranking are:**

- Psychology
- Educational/sport/business/animal psychology
- Clinical psychology

### Different weights and measures

The subject tables employ the same range of 13 performance indicators used in the overall World University Rankings 2022, 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.

**The weightings for the psychology ranking are:**

- **Teaching: the learning environment**  
27.5 per cent
- **Research: volume, income and reputation**  
27.5 per cent
- **Citations: research influence**  
35 per cent
- **International outlook: staff, students and research**  
7.5 per cent
- **Industry income: innovation**  
2.5 per cent

### Criteria

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

No institution can be included in the overall World University Rankings unless it has published at least 1,000 relevant publications over the five years that we examine.

For the 11 subject tables, the publication thresholds are set differently.

For psychology, the threshold drops to 150 papers published in this discipline over the past five years.

There is also an academic staff eligibility criterion. Prior to the 2019 subject rankings, an institution had to have at least 1 per cent of its academic staff working in the psychology discipline to be included in the subject table.

Since the 2019 subject rankings, we have made a small adjustment in the staff eligibility criterion. An institution needs to have either a minimum proportion of its staff or a minimum number of staff members in this discipline to be included in the subject ranking.

For psychology, an institution must have either at least 1 per cent of its academic staff or at least 20 academic staff members in this discipline.

*\*Academic staff is defined as the full-time equivalent number of staff employed in an academic post, for example, lecturer, reader or professor."*<sup>28</sup>

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<sup>28</sup> In <https://www.timeshighereducation.com/world-university-rankings-2022-subject-psychology-methodology> accessed 20210916



## Social sciences

"The *Times Higher Education* World University Rankings 2022 social sciences subject ranking includes a range of narrower subject areas.

**The subjects used to create this ranking are:**

- Communication and media studies
- Politics and international studies (including development studies)
- Sociology
- Geography

### Different weights and measures

The subject tables employ the same range of 13 performance indicators used in the overall World University Rankings 2022, 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.

**The weightings for the social sciences ranking are:**

- **Teaching: the learning environment**  
32.4 per cent
- **Research: volume, income and reputation**  
32.6 per cent
- **Citations: research influence**  
25 per cent
- **International outlook: staff, students and research**  
7.5 per cent
- **Industry income: innovation**  
2.5 per cent

### Criteria

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

No institution can be included in the overall World University Rankings unless it has published a minimum of 1,000 relevant publications over the five years that we examine.

For each of the 11 subject rankings, the publication thresholds are different. For social sciences, the threshold drops to 200 papers published in this discipline over the past five years.

There is also an academic staff eligibility criterion. Prior to the 2019 subject rankings, we expected an institution to have at least 4 per cent of its academic staff members working in the social sciences discipline in order to include it in the subject table.

Since the 2019 subject rankings, we have made a small adjustment to the staff eligibility criterion. An institution needs to have either a minimum proportion of its staff or a minimum number of staff in this discipline to be included in the subject ranking.

For social sciences, we expect an institution to have either at least 4 per cent of its academic staff in the social sciences discipline or at least 40 academic staff in the social sciences discipline.

*\*Academic staff is defined as the full-time equivalent number of staff members employed in an academic post, for example, lecturer, reader or professor."*<sup>29</sup>

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<sup>29</sup> In <https://www.timeshighereducation.com/world-university-rankings-2022-subject-social-sciences-methodology>  
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