

A Universidade do Porto no University Ranking by Academic Performance URAP - World Ranking 2018-2019

Reitoria da Universidade do Porto
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<http://www.urapcenter.org/2018/>

1. Metodologia do URAP – World Ranking 2018-2019 e participação da U.Porto

O URAP World Ranking é elaborado pelo *Informatics Institute* da *Middle East Technical University*, Turquia.

O *Informatics Institute* da *Middle East Technical University* não solicita informações às Universidades.

A partir da edição de 2017-2018 o URAP World Ranking alterou a metodologia relativamente aos indicadores “Article” e “Citation”, nos quais passaram a ser considerados apenas os artigos publicados em revistas dos primeiro, segundo e terceiro quartis do *Journal Citation Reports*, sendo ainda excluídos os artigos com mais de 1000 autores.

“Aim and Scope

The URAP ranking system's focus is on academic quality. URAP has gathered data about 3,000 Higher Education Institutes (HEI) in an effort to rank these organizations by their academic performance. The overall score of each HEI is based upon its performance over several indicators which are described in the Ranking Indicators section. The ranking includes HEIs except for governmental academic institutions, e.g. the Chinese Academy of Science and the Russian Academy of Science, etc. Data for 3,000 HEIs have been processed and top 2,500 of them are scored. Thus, URAP covers approximately 12% of all HEIs in the world, which makes it one of the most comprehensive university ranking systems in the world.

URAP ranking system is completely based on objective data obtained from reliable open sources. The system ranks the universities according to multiple criteria. Most of the currently available ranking systems are both size and subject dependent. The AIT and CIT indicators aim to minimize the influence of differences among publication trends across disciplines by providing subject level adjustment. As of 2017, URAP employed a new filter for the article and citation indicators to promote publication quality by focusing on articles published in journals that are listed within the first, second and third quartiles in terms of their Journal Impact Factor within their respective subject areas. The URAP research team is continuously working on new methods to improve the existing indicators.

The goal of the URAP ranking system is not to label world universities as best or worst. Our intention is to help universities identify potential areas of progress with respect to specific academic performance indicators. Similar to other ranking systems, the URAP system is neither exhaustive nor definitive, and is open to new ideas and improvements. The current ranking system will be continuously upgraded based on our ongoing research and the constructive feedback of our colleagues.”¹

“World Ranking Indicators

URAP 2018-2019 World Ranking is based on 6 academic performance indicators. Since URAP is an academic performance based ranking, publications constitute the basis of the ranking methodology. Both quality and quantity of publications and international research collaboration performance are used as indicators. The indicators, the data sources, and the duration of coverage are summarized in the table below.

Indicator	Objective	Coverage	Source
Article	Current Scientific Productivity	2017	InCites
Citation	Research Impact	2013-2017	InCites
Total Document	Scientific Productivity	2013-2017	InCites
Article Impact Total	Research Quality	2013-2017	InCites
Citation Impact Total	Research Quality	2013-2017	InCites
International Collaboration	International Acceptance	2013-2017	InCites

A detailed description of each indicator is provided below:

¹ <http://www.urapcenter.org/2018/methodology.php?q=2> acessado a 17 de dezembro de 2018.

Article: is a measure of current scientific productivity which includes articles published in journals that are listed within the first, second and third quartiles in terms of their Journal Impact Factor. Articles that include more than 1000 authors are excluded. The weight of this indicator on the overall ranking is %21.

Citation: is a measure of research impact and scored according to the total number of citations received in 2013-2017 for the articles published in 2013-2017 in journals that are listed within the first, second and third quartiles in terms of their Journal Impact Factor. Articles that include more than 1000 authors are excluded. The effect of citation on the overall ranking is %21.

Total Document: is the measure of sustainability and continuity of scientific productivity and presented by the total document count which covers all scholarly output of the institutions, including conference papers, reviews, letters, discussions, scripts in addition to journal articles published during 2013-2017 period. The total document counts are not subjected to any filtering. The weight of this indicator is %10.

Article Impact Total (AIT): is a measure of scientific productivity corrected by the institution's normalized CPP(1) with respect to the world CPP in 23 subject areas between 2013 and 2017. The ratio of the institution's CPP and the world CPP indicates whether the institution is performing above or below the world average in that field. This ratio is multiplied by the number of publications in that field and then summed across the 23 fields. which is summarized in the following formula:

$$AIT = \sum_{i=1}^{23} \left(\frac{CPP_i}{CPP_{world}} \right) * Articles_i$$

This indicator aims to balance the institution's scientific productivity with the field normalized impact generated by those publications in each field. The weight of this indicator is %18.

Citation Impact Total (CIT) is a measure of research impact corrected by the institution's normalized CPP with respect to the world CPP in 23 subject areas between 2013 and 2017. The ratio of the institution's CPP and the world CPP indicates whether the institution is performing above or below the world average in that field. This ratio is multiplied by the number of citations in that field and then summed across the 23 fields. This indicator aims to balance the institution's scientific impact with the field normalized impact generated by the publications in each field, , which is summarized in the following formula:

$$CIT = \sum_{i=1}^{23} \left(\frac{CPP_i}{CPP_{world}} \right) * Citations_i$$

The contribution of this indicator to the overall ranking is %15.

International Collaboration is a measure of global acceptance of a university. International collaboration data, which is based on the total number of articles published in collaboration with foreign universities, is obtained from InCites for the years 2013-2017. The weight of this indicator is %15 in the overall ranking.”²

“Data Collection & Scoring

Data is gathered from Web of Science and InCites which provide lists of HEIs. 3000 HEIs with highest number of publications were initially considered, and 2500 of them were ranked after data processing. Reliability of ranking depends mostly on the quality of the data used. In order to provide reliable data, pre-processing and data cleaning techniques were employed. Statistical analysis indicated that the raw bibliometric data underlying our indicators had highly skewed distributions. Therefore, the indicator values above and below the median are linearly scored in two groups. The Delphi system was conducted with a group of experts to assign weighting scores to the indicators. Total score of 600 is distributed to each indicator as follows:

Article: % 21

Total Document: % 10

Citation: %21

Article Impact Total: %18

Citation Impact Total: %15

International Collaboration: %15”³

² <http://www.urapcenter.org/2018/methodology.php?q=3> acedido a 17 de dezembro de 2018.

³ <http://www.urapcenter.org/2018/methodology.php?q=4> acedido a 17 de dezembro de 2018.

2. Evolução das posições da U.Porto no URAP – World Ranking

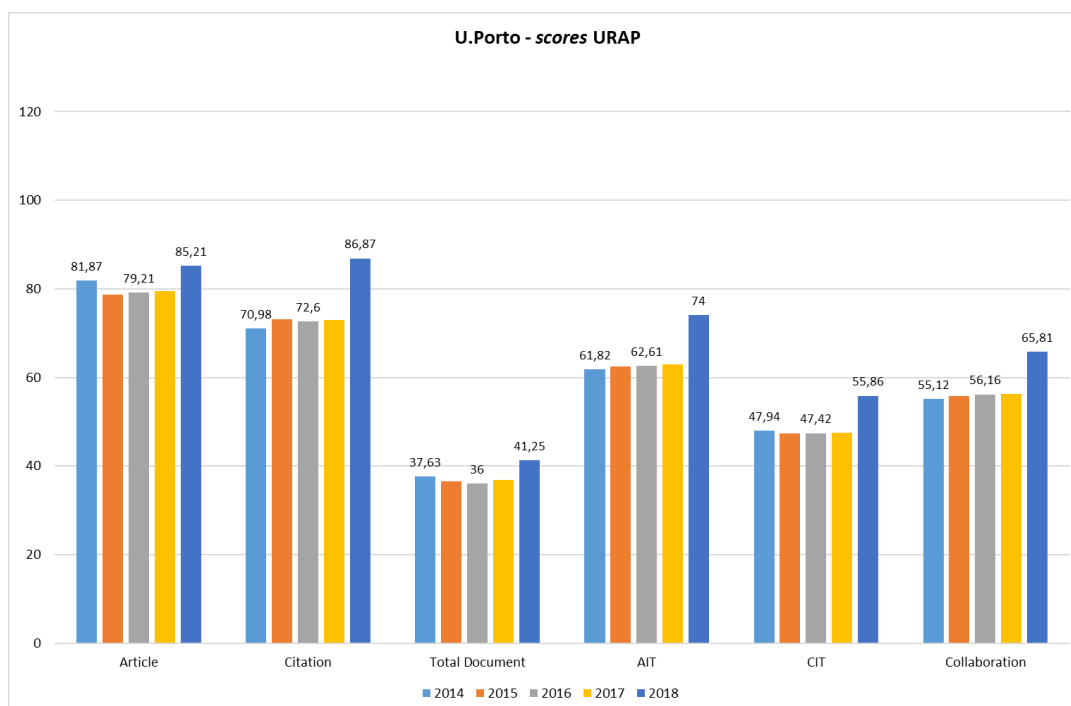
Universidade do Porto: evolução⁴

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ranking Mundial	259	229	218	219	189	183	187	178	179
Ranking Europeu	109	94	93	94	84	82	83	78	77
Ranking Ibero-Americano	10	8	8	8	6	6	6	6	5
Ranking Nacional	1	1	1	1	2	2	2	2	2

Universidade do Porto: scores 2014 a 2018

	2014	2015	2016	2017	2018
Article	81,87	78,75	79,21	79,53	85,21
Citation	70,98	73,10	72,60	72,97	86,87
Total Document	37,63	36,56	36,00	36,80	41,25
AIT	61,82	62,47	62,61	62,99	74,00
CIT	47,94	47,38	47,42	47,53	55,86
Collaboration	55,12	55,85	56,16	56,29	65,81
Total Score	355,36	354,11	353,99	356,11	409,00

Gráfico 1: Scores da U.Porto no URAP World Ranking



⁴ Dados de 2010 a 2013 retirados de “Evolução das posições da Universidade do Porto nos rankings universitários”, jan de 2014, in https://sigarra.up.pt/up/pt/conteudos_service.conteudos_cont?pct_id=20113&pv_cod=55GoHdmanvlq; dados de 2014, 2015, 2016, 2017 e 2018 retirados respetivamente em 12 novembro de 2014 de <http://www.urapcenter.org/2014/>; em 21 de dezembro de 2015 de <http://www.urapcenter.org/2015/>; em 17 de outubro de 2016 de <http://www.urapcenter.org/2016/>, em 2 de novembro de 2017 de <http://www.urapcenter.org/2017/> e em 17 de dezembro de 2018 de <http://www.urapcenter.org/2018/>.

3. As Instituições de Ensino Superior portuguesas no URAP – World Ranking 2018/2019

Posições das IES portuguesas no URAP – World Ranking 2018-2019

	Mundo		Europa		Ibero-América		Portugal	
	2017	2018	2017	2018	2017	2018	2017	2018
Universidade de Lisboa	117	122	46	46	3	3	1	1
Universidade do Porto	178	179	78	77	6	5	2	2
Universidade de Coimbra	299	320	131	140	16	15	4	3
Universidade de Aveiro	384	393	168	170	26	24	5	4
Universidade Nova de Lisboa	423	432	186	187	30	29	6	5
Universidade do Minho	430	456	190	200	32	32	7	6
Universidade do Algarve	951	976	398	400	81	82	8	7
University of Tras-os-Montes & Alto Douro	1040	1076	431	430	88	93	9	8
Universidade da Beira Interior	1065	1140	445	455	90	102	10	9
University of Evora	1099	1252	459	489	93	113	11	10
Polytechnic Institute of Porto	1222	1258	493	491	109	115	12	11
Instituto Universitario de Lisboa	1521	1476	585	555	134	132	13	12
Instituto Politecnico de Braganca	1526	1623	587	599	137	153	14	13
Universidade dos Acores	1607	1641	613	604	145	155	15	14
Polytechnic Institute of Lisbon	1760	1798	645	637	156	166	17	15
Universidade da Madeira	1738	1807	640	641	153	167	16	16
Universidade Catolica Portuguesa	1831	1816	669	643	164	168	18	17
Instituto Superior de Ciencias da Saude Egas Moniz	2230	2172	767	748	202	200	20	18
Instituto Superior Psicologia Aplicada (ISPA)	2178	2264	756	767	199	209	19	19
National Civil Engineering Laboratory	2388	2401	807	793	217	225	22	20
Nº IES	2500	2499	836	817	234	237	22*	20

* Na edição de 2017/2018, estavam listadas a Universidade Técnica de Lisboa (posição 291 do mundo e 3 em Portugal) e a Universidade Fernando Pessoa (posição 2291 do mundo e 21 em Portugal).

Scores das IES portuguesas no URAP – World Ranking 2018-2019

World Ranking		IES	Article		Citation		Total Document		AIT		CIT		Collaboration		Total	
2017	2018		2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
117	122	Universidade de Lisboa	84,48	93,64	75,87	90,98	39,24	44,79	68,4	80,43	49,34	59,61	60,91	71,45	378,24	440,89
178	179	Universidade do Porto	79,53	85,21	72,97	86,87	36,8	41,25	62,99	74	47,53	55,86	56,29	65,81	356,11	409
299	320	Universidade de Coimbra	71,54	69,44	68,64	75,27	34,46	37,07	61,06	67,06	47,7	52,25	51,31	57,21	334,71	358,29
384	393	Universidade de Aveiro	70,55	67,13	67,43	71,42	32,72	32,04	58,44	61,6	46,19	46,74	50,67	56,04	326	334,96
423	432	Universidade Nova de Lisboa	68,79	61,13	66,41	67,82	32,55	31,52	58,76	61,85	46,81	48,84	49,5	52,78	322,82	323,93
430	456	Universidade do Minho	68,53	60,2	66,05	65,47	32,57	31,6	58,83	60,75	47,15	48,67	48,99	51,36	322,11	318,06
951	976	Universidade do Algarve	63,9	39,59	63,49	45,41	30,22	18,47	54,6	39,6	45,13	30,7	46,35	39,59	303,68	213,36
1040	1076	University of Tras-os-Montes & Alto Douro	63,44	33,78	63,31	44,39	30,19	17,91	54,36	37,77	45,08	30,66	45,59	33,72	301,97	198,22
1065	1140	Universidade da Beira Interior	63,5	31,57	63,21	43,43	30,2	18,57	54,22	35,9	45,06	30,42	45,26	30,99	301,46	190,87
1099	1252	University of Evora	63,37	27,72	63,18	40,43	28,66	15,58	54,19	33,7	45,08	28,13	45,56	32,82	300,04	178,37
1222	1258	Polytechnic Institute of Porto	50,06	28,85	63,06	40,37	30,1	17,49	54,1	34,29	45,05	29,61	42,42	27,09	284,79	177,7
1521	1476	Instituto Universitario de Lisboa	47,5	27,4	31,53	29,92	22,96	14,9	39,81	30,4	23,68	22,89	45,05	28,25	210,52	153,76
1526	1623	Instituto Politecnico de Braganca	36,41	18,82	46,74	33,08	16,89	10,54	34,65	25,7	30,54	23,74	43,89	25,91	209,12	137,8
1607	1641	Universidade dos Acores	25,6	17,42	37,86	31,38	11,6	9,36	36,42	26,54	34,17	23,37	45,11	27,95	190,76	136,02
1760	1798	Polytechnic Institute of Lisbon	21,34	17,78	34,77	28,63	13,72	10,77	28,29	22,54	26,74	20,14	24,15	20,57	149,01	120,45
1738	1807	Universidade da Madeira	9,39	9,38	36,4	31,04	6,5	6,38	27,63	23,91	45,01	27,77	27,64	21,4	152,58	119,88
1831	1816	Universidade Catolica Portuguesa	14,51	9,73	34,92	31,06	11,46	8,86	26,59	25,06	24,08	24,43	24,15	19,95	135,71	119,09
2230	2172	Instituto Superior de Ciencias da Saude Egas Moniz	14,8	11,22	15,9	21,99	4,48	5,39	10,82	14,73	9,75	14,94	14	17,29	69,74	85,56
2178	2264	Instituto Superior Psicologia Aplicada (ISPA)	14,8	8,49	12,33	16,61	4,95	4,48	12,82	14,75	11,32	13,96	19,19	19,11	75,4	77,4
2388	2401	National Civil Engineering Laboratory	7,12	2,86	10,65	16,01	4,31	4,32	10,89	15,17	6,97	13,96	8,7	12,32	48,63	64,64

Gráfico 2: Total scores das IES portuguesas no URAP World Ranking

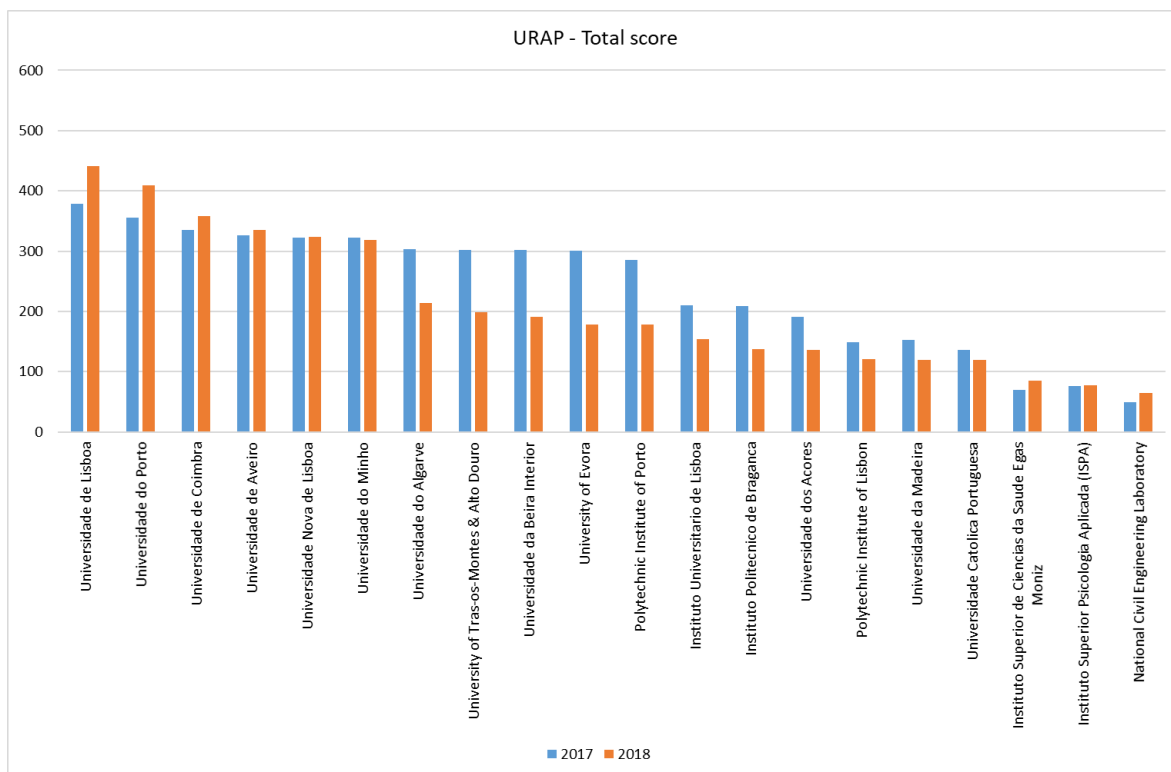


Gráfico 3: Scores do indicador "Article" das IES no URAP World Ranking

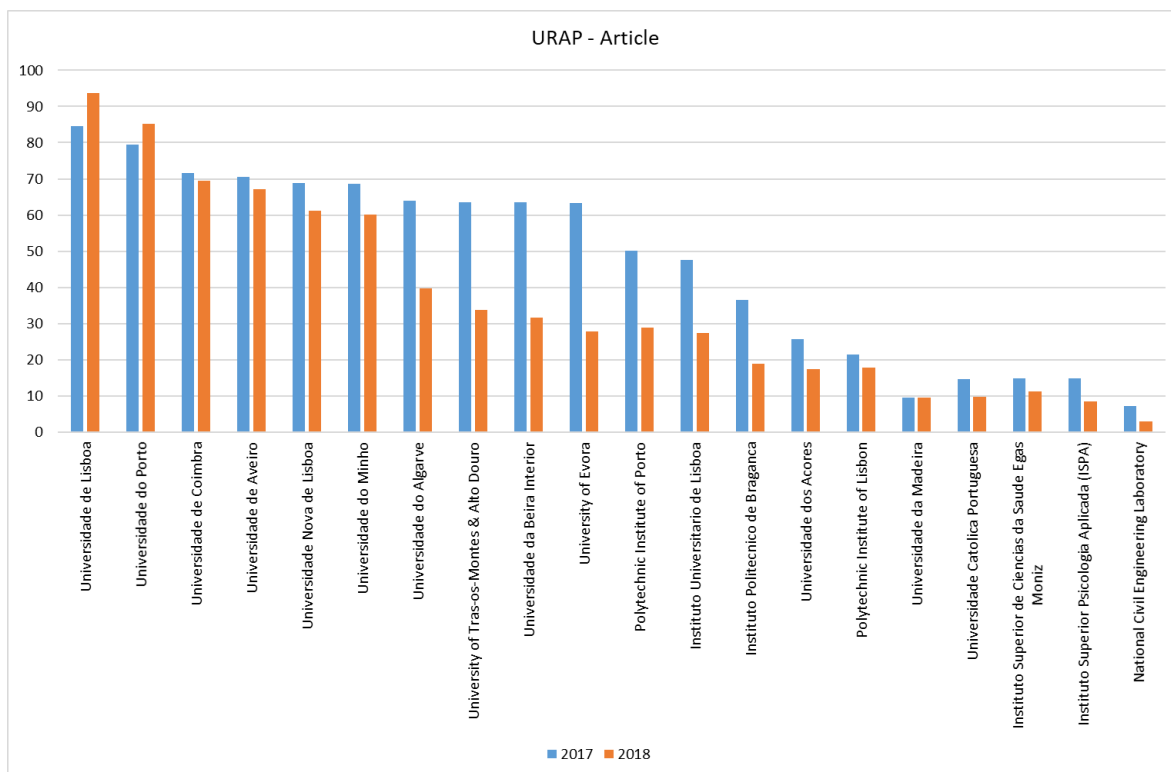


Gráfico 4: Scores do indicador "Citation" das IES no URAP World Ranking

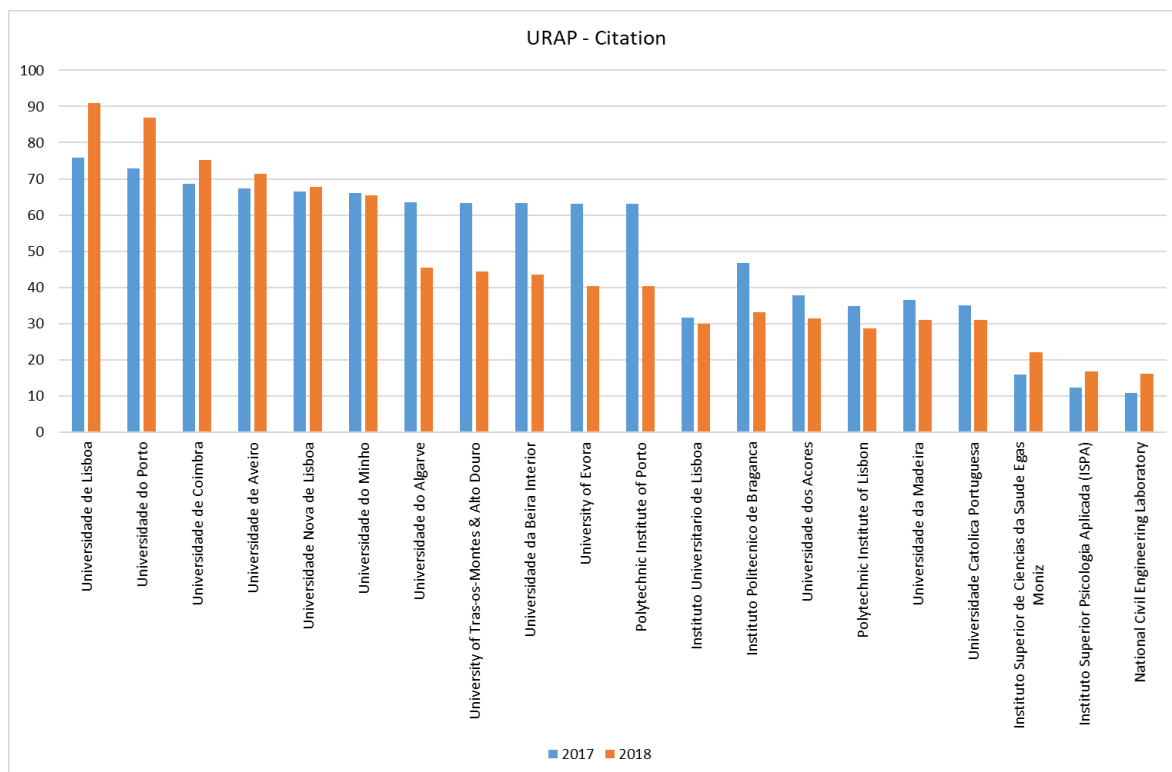


Gráfico 5: Scores do indicador "Total Document" das IES portuguesas no URAP World Ranking

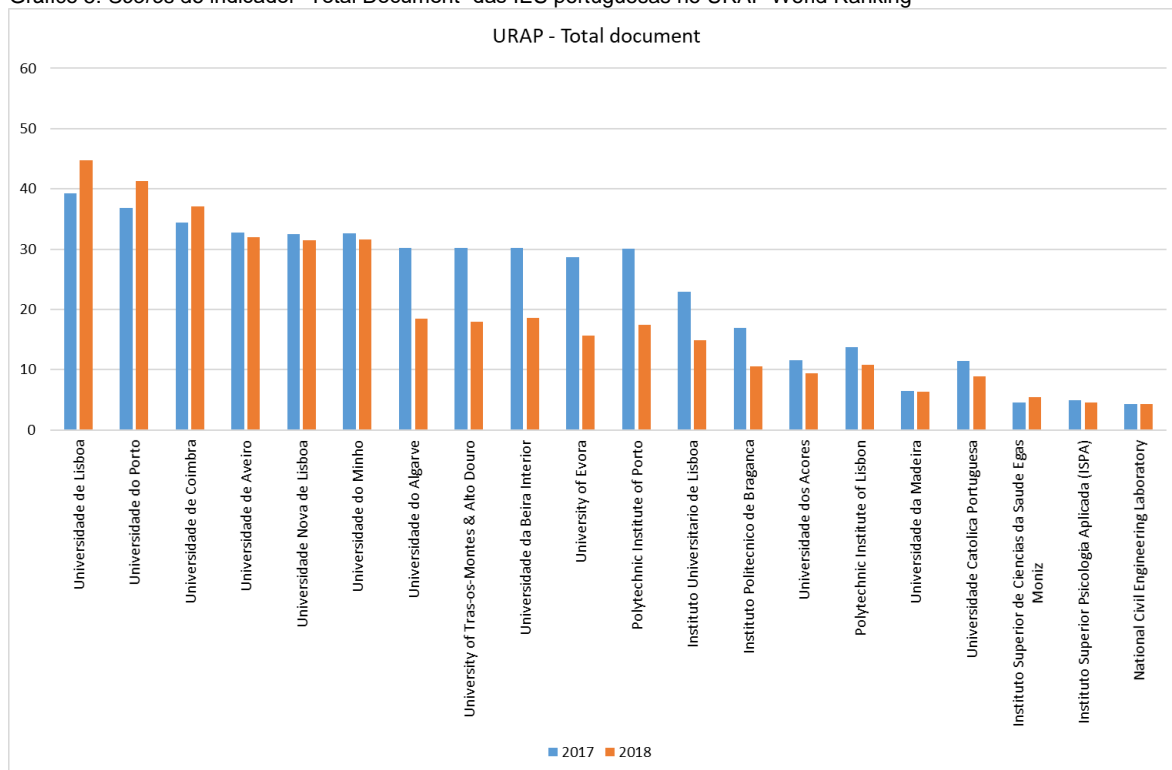


Gráfico 6: Scores do indicador "AIT" das IES portuguesas no URAP World Ranking

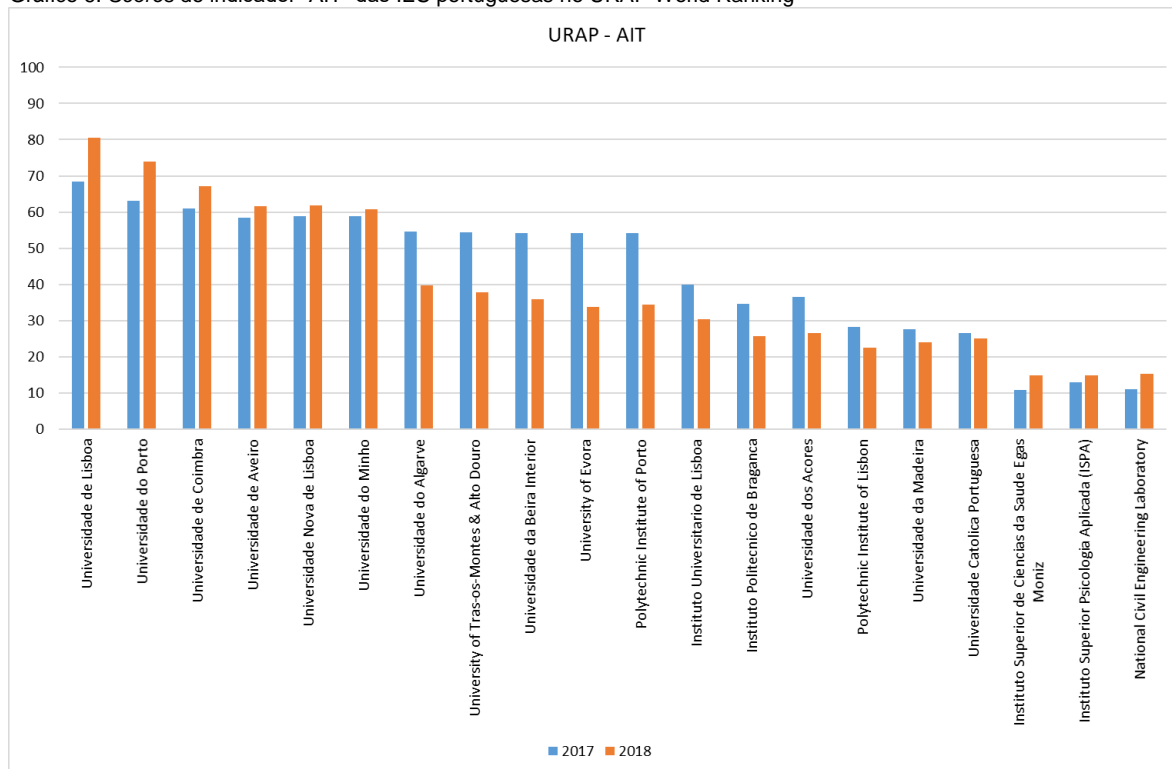


Gráfico 7: Scores do indicador "CIT" das IES portuguesas no URAP World Ranking

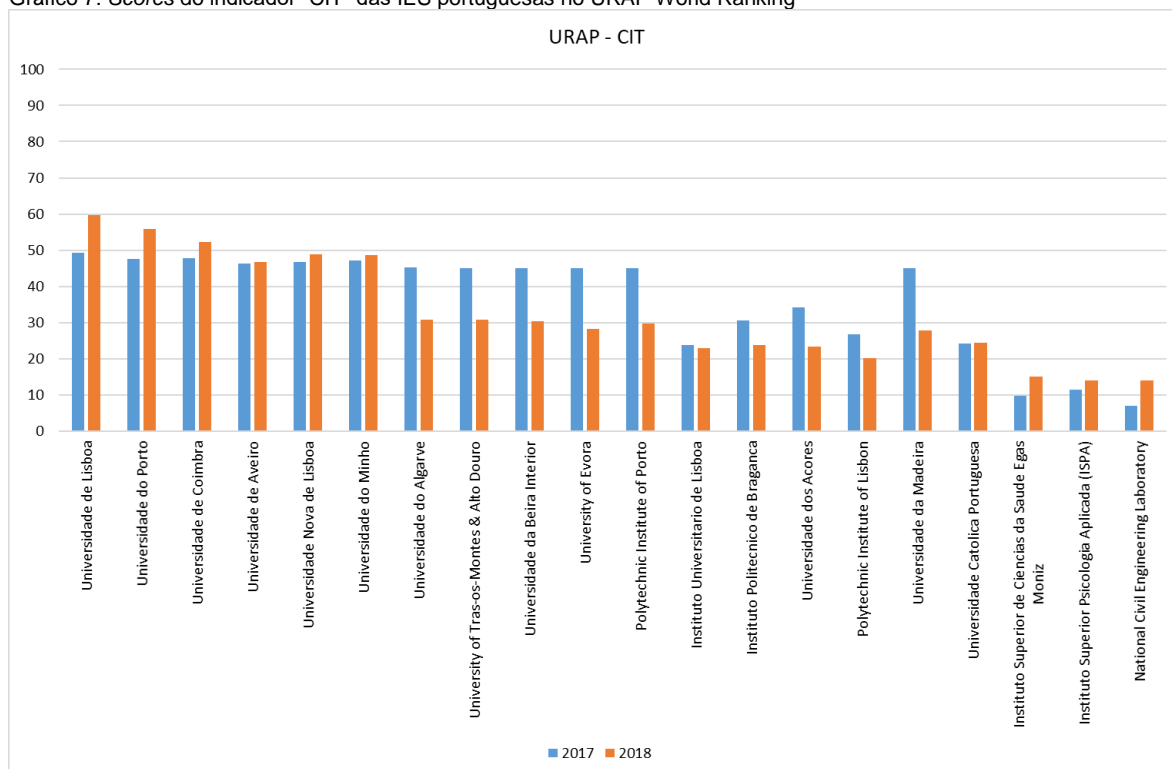


Gráfico 8: Scores do indicador "Collaboration" das universidades portuguesas no URAP World Ranking

