

A Universidade do Porto no University Ranking by Academic Performance URAP - World Ranking 2015-2016

Universidade do Porto. Reitoria.
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<http://www.urapcenter.org/2015/>

1. Metodologia do URAP – World Ranking 2015-2016 e participação da U.Porto

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

“University Ranking by Academic Performance (URAP) Research Laboratory was established at Informatics Institute of Middle East Technical University in 2009. Main objective of URAP is to develop a ranking system for the world universities based on academic performances which determined by quality and quantity of scholarly publications. In line with this objective yearly World Ranking of 2000 Higher Education Institutions have been released since 2010.”¹

“Aim and Scope

The URAP ranking system's focus is on academic quality. URAP has gathered data about 2,500 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 2,500 HEIs have been processed and top 2,000 of them are scored. Thus, *URAP covers approximately 10% 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 URAP research team is currently working on a new methodology which will minimize the impact of size and subject dependency.

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.”²

“World Ranking Indicators

URAP 2014-2015 [³] 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.

¹ <http://www.urapcenter.org/2015/> Acedido 21 dezembro de 2015.

² <http://www.urapcenter.org/2015/methodology.php?q=2> Acedido 21 dezembro de 2015.

³ A versão inglesa do site mantém as datas de referência da edição de 2014-2015.

Indicator	Objective	Coverage [³]	Source
Article	Current Scientific Productivity	2013	InCites
Citation	Research Impact	2011-2013	InCites
Total Document	Scientific Productivity	2011-2013	Web of Science
Article Impact Total	Research Quality	2011-2013	InCites
Citation Impact Total	Research Quality	2011-2013	InCites
International Collaboration	International Acceptance	2011-2013	InCites

A detailed description of each indicator is provided below:

Article: is a measure of current scientific productivity which includes articles published in 2013 and indexed by Web of Science and listed by Incites. Article number covers articles, reviews and notes. 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 2011-2013 for the articles published in 2011-2013 and indexed by Web of Science. 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 literature including conference papers, reviews, letters, discussions, scripts in addition to journal articles published during 2011-2013 period. 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 2011 and 2013. 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:

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

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 2011 and 2013. 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:

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

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 publications made in collaboration with foreign universities, is obtained from InCites for the years 2011-2013. The weight of this indicator is %15 in the overall ranking. For the 2014 URAP World Ranking, bibliometric data is obtained through Thomson Reuters' InCites research analytics service(2), which provides an interface to the Web of Science database. The 23 subject areas used in the ranking are based on the discipline classification matrix developed by the Australian Research Council for journals indexed in Web of Science(3)

(1)CPP stands for citation per publication

(2)<http://researchanalytics.thomsonreuters.com/incites>

(3)<http://www.arc.gov.au/pdf/ERA15/ERA%202015%20Discipline%20Matrix.pdf> ⁴

³ A versão inglesa do site mantém as datas de referência da edição de 2014-2015. Deve ler-se "2014" em substituição de "2013" e "2012-2014" em substituição de "2011-2013".

⁴ <http://www.urapcenter.org/2015/methodology.php?q=3#> Acedido 21 dezembro 2015.

“Data Collection & Scoring

Data is gathered from Web of Science and other sources which provide lists of HEIs. 2500 HEIs with highest number of publications were initially considered, and 2000 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”⁵

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

⁵ <http://www.urapcenter.org/2015/methodology.php?q=4> Acedido 21 dezembro 2015.

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

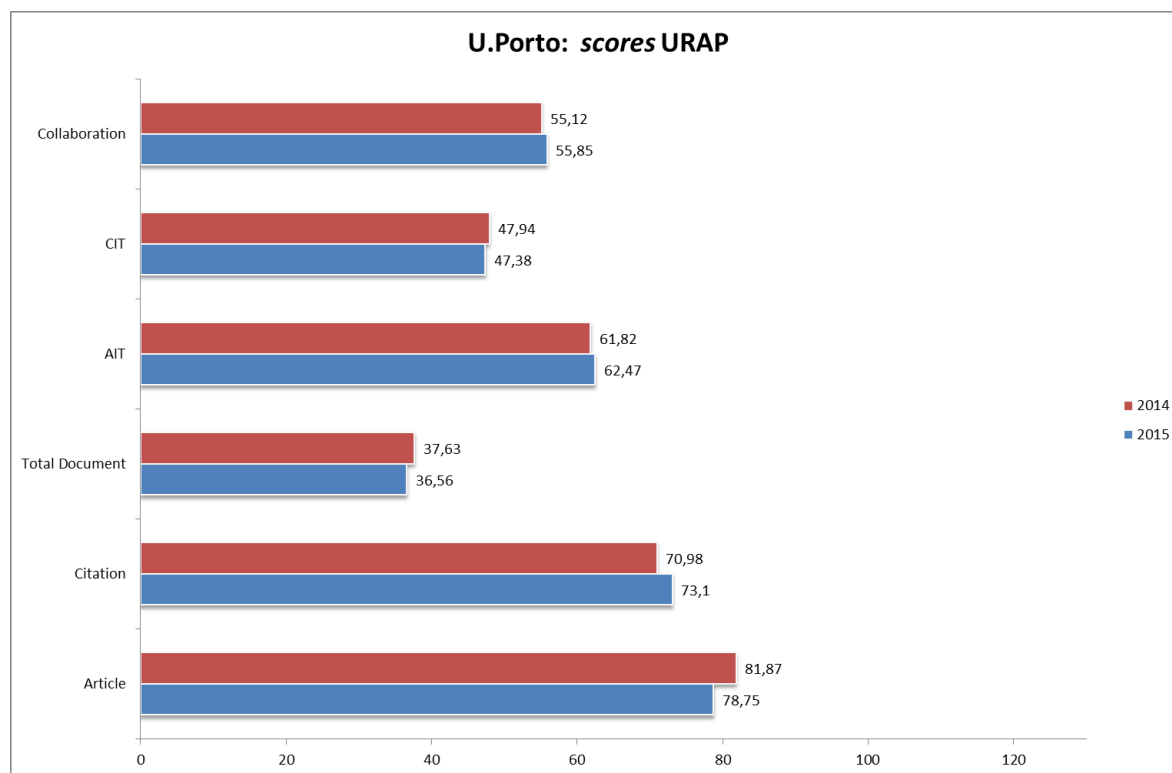
Universidade do Porto: evolução⁶

	2010	2011	2012	2013	2014	2015
Ranking Mundial	259 Score: 325.89	229 Score: 327.95	218 Score: 328.22	219 Score: 348.32	189 Score: 355.36	183 Score: 354.11
Ranking Europeu	109	94	93	94	84	82
Ranking Iberoamericano	10	8	8	8	6	6
Ranking Nacional	1	1	1	1	2	2

Universidade do Porto: scores 2014 e 2015

	2014	2015
Article	81,87	78,75
Citation	70,98	73,10
Total Document	37,63	36,56
AIT	61,82	62,47
CIT	47,94	47,38
Collaboration	55,12	55,85
Total	355,36	354,11

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



⁶ Dados de 2014 retirados em 12 novembro de 2014 de <http://www.urapcenter.org/2014/>. Dados de 2010 a 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

3. Posição das Universidades portuguesas no URAP – World Ranking

Universidades portuguesas no URAP – World Ranking 2015-2016

	World Ranking		Europa		Iberoamérica		Portugal	
	2014	2015	2014	2015	2014	2015	2014	2015
Universidade de Lisboa	125	121	52	51	4	4	1	1
Universidade do Porto	189	183	84	82	6	6	2	2
Universidade de Coimbra	304	304	133	134	15	16	3	3
Universidade de Aveiro	400	397	178	175	27	26	4	4
Universidade Nova de Lisboa	429	420	185	181	31	30	6	5
Universidade do Minho	427	428	183	185	30	31	5	6
Universidade do Algarve	897	898	382	377	77	74	7	7
Universidade de Trás-os-Montes e Alto Douro	1041	1025	428	423	88	87	8	8
Universidade da Beira Interior	1207	1096	483	452	104	93	10	9
Universidade de Évora	1091	1105	448	456	92	94	9	10
Instituto Politécnico de Lisboa	1512	1523	579	580	127	128	11	11
Universidade da Madeira	*	1560	*	593	*	131	*	12
Universidade Católica Portuguesa	1571	1591	600	600	133	136	12	13
ISCTE Instituto Universitário de Lisboa	1713	1640	642	617	141	140	13	14
Instituto Politécnico de Bragança	*	1749	*	654	*	148	*	15
Instituto Politécnico do Porto	1841	1792	682	665	150	152	14	16
Instituto Superior de Psicologia Aplicada (ISPA)	1944	1945	709	709	158	162	15	17
Nº IES	2000	1998	734	730	159	166	15	17

* não constava na edição de 2014.

Scores das Universidades portuguesas no URAP – World Ranking 2015-2016

World Ranking			Article		Citation		Total Document		AIT		CIT		Collaboration		Total	
2014	2015		2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015
125	121	Universidade de Lisboa	87,58	83,91	74,25	76,43	39,50	37,88	65,08	65,00	49,40	48,24	59,86	61,06	375,66	372,52
189	183	Universidade do Porto	81,87	78,75	70,98	73,10	37,63	36,56	61,82	62,47	47,94	47,38	55,12	55,85	355,36	354,11
304	304	Universidade de Coimbra	72,51	70,80	68,17	69,30	33,99	33,77	58,39	59,06	47,51	47,12	50,53	51,29	331,10	331,34
400	397	Universidade de Aveiro	70,54	69,63	65,73	67,17	32,67	32,47	57,33	58,01	45,96	46,02	49,29	50,07	321,51	323,37
429	420	Universidade Nova de Lisboa	69,07	68,70	65,76	66,73	32,27	32,24	56,84	57,50	46,15	46,15	48,61	49,54	318,70	320,85
427	428	Universidade do Minho	68,46	67,94	66,02	66,93	32,25	32,17	56,83	57,48	46,70	46,55	48,59	49,31	318,86	320,38
897	898	Universidade do Algarve	62,70	63,29	62,42	63,22	29,73	30,05	53,69	54,34	44,57	45,04	45,65	46,14	298,76	302,09
1041	1025	Universidade de Trás-os-Montes e Alto Douro	62,58	63,18	55,68	58,54	29,07	30,01	50,27	54,02	32,43	35,86	45,08	45,50	275,10	287,12
1207	1096	Universidade da Beira Interior	50,04	61,81	44,50	57,00	23,72	27,97	43,43	48,64	31,87	36,33	32,53	41,80	226,09	273,55
1091	1105	Universidade de Évora	47,69	44,92	54,03	61,17	21,07	21,72	50,16	54,02	44,56	45,03	44,82	45,36	262,33	272,23
1512	1523	Instituto Politécnico de Lisboa	13,04	15,51	30,33	32,17	9,37	10,20	29,23	32,49	32,60	36,37	17,57	18,57	132,14	145,30
*	1560	Universidade da Madeira	*	4,78	*	35,15	*	6,32	*	25,62	*	40,08	*	22,3	*	134,27
1571	1591	Universidade Católica Portuguesa	16,18	17,50	28,13	29,16	10,41	10,31	25,13	28,18	22,30	25,07	18,41	18,03	120,56	128,24
1713	1640	ISCTE Instituto Universitário de Lisboa	19,11	28,23	12,95	18,75	9,89	14,22	13,68	16,91	7,67	8,83	25,12	29,51	88,41	116,44
*	1749	Instituto Politécnico de Bragança	*	10,94	*	23,59	*	8,29	*	16,66	*	14,34	*	20,84	*	94,65
1841	1792	Instituto Politécnico do Porto	14,22	16,90	10,46	18,63	5,55	8,96	11,92	14,03	11,19	13,47	9,32	13,63	62,66	85,63
1944	1945	Instituto Superior de Psicologia Aplicada (ISPA)	1,89	5,97	8,62	9,16	3,87	5,71	9,66	11,03	7,96	8,81	14,35	14,70	46,35	55,38

* não constava na edição de 2014

Gráfico 2: *Total scores* das universidades portuguesas no URAP World Ranking

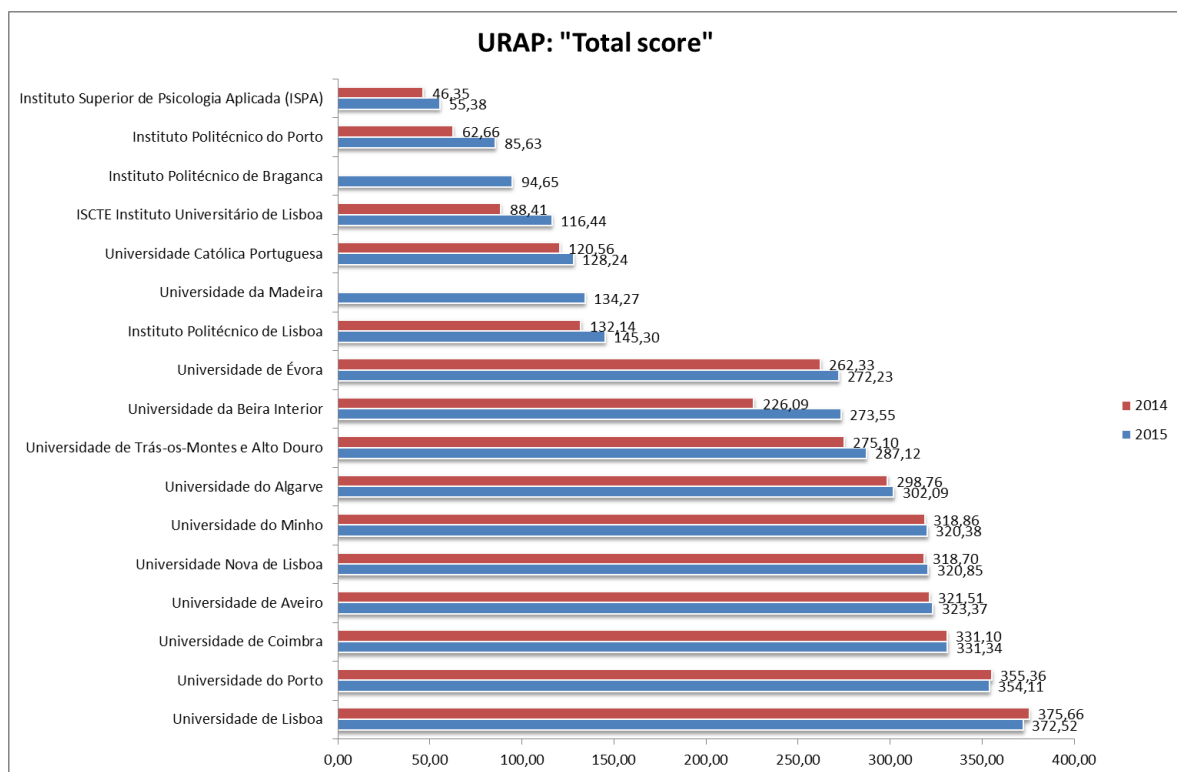


Gráfico 3: *Scores de indicador "Article"* das universidades portuguesas no URAP World Ranking

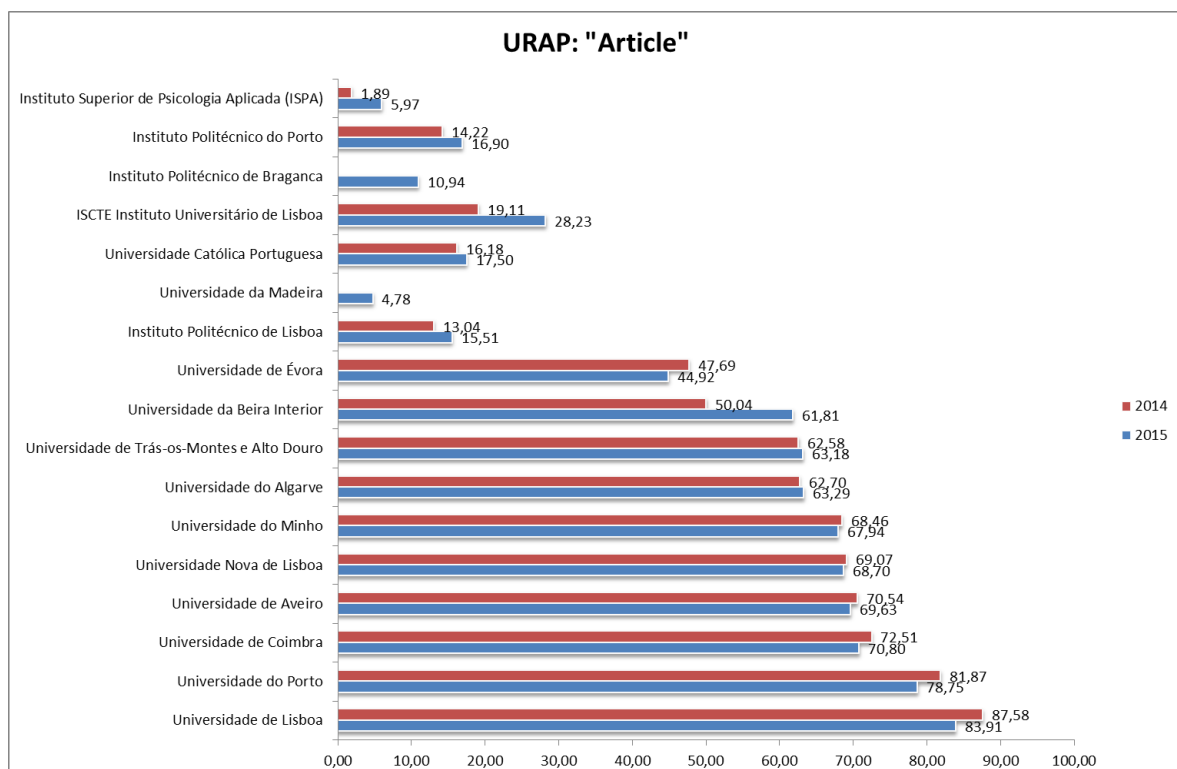


Gráfico 4: Scores de indicador “Citation” das universidades portuguesas no URAP World Ranking

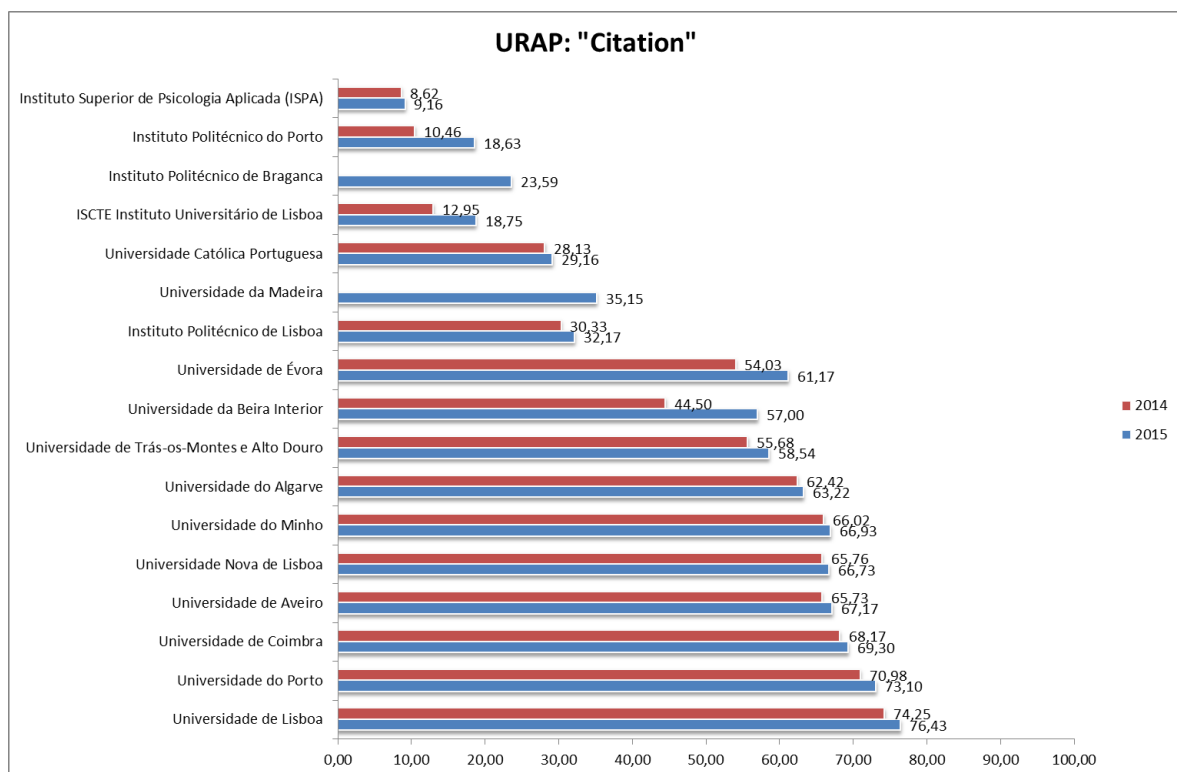


Gráfico 5: Scores de indicador “Total Document” das universidades portuguesas no URAP World Ranking

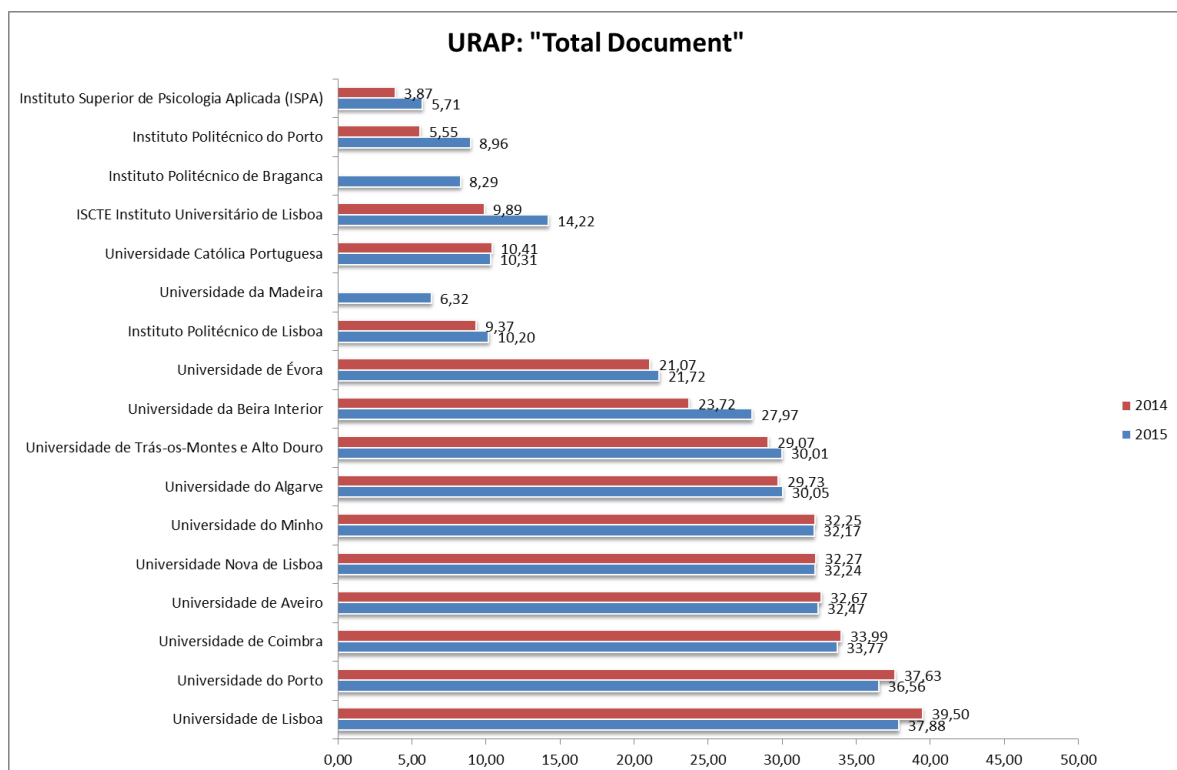


Gráfico 6: Scores de indicador “AIT” das universidades portuguesas no URAP World Ranking

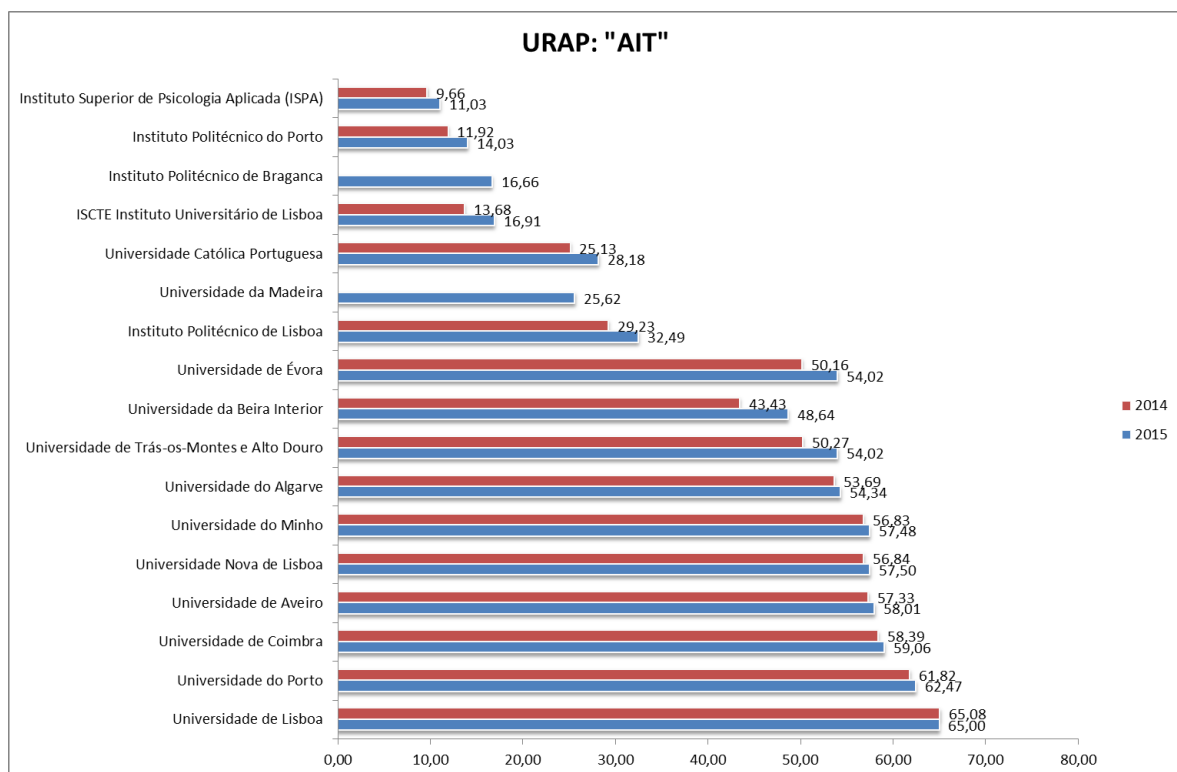


Gráfico 7: Scores de indicador “CIT” das universidades portuguesas no URAP World Ranking

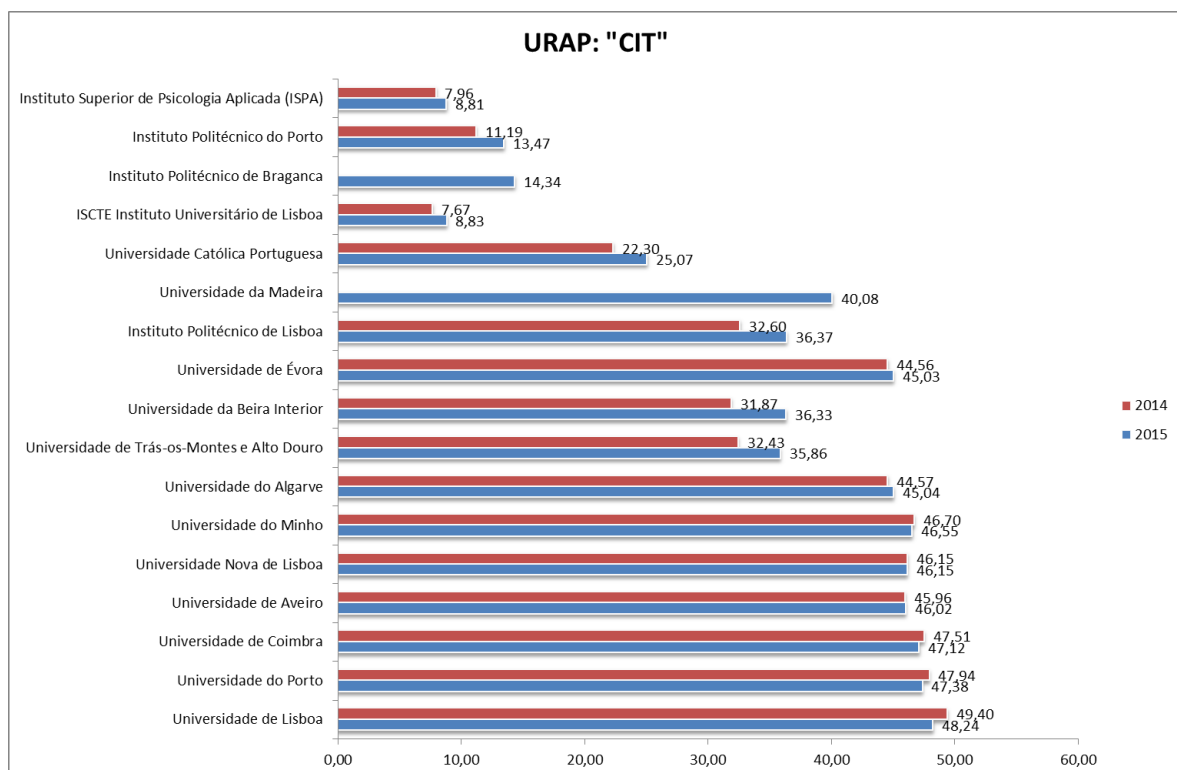


Gráfico 8: Scores de indicador “*Collaboration*” das universidades portuguesas no URAP World Ranking

