IREG Inventory of International University Rankings



2014-17



The purpose of IREG Observatory on Academic Ranking and Excellence is to strengthen public awareness and understanding of university rankings and their role in reflecting quality of higher education and academic excellence.

from the IREG Observatory Statute



(IREG *stands for* International Ranking Expert Group) www.ireg-observatory.org

IREG Inventory of International University Rankings

2014-17



The "IREG Inventory of International University Rankings" was prepared by the Perspektywy Education Foundation at the request of the IREG Observatory on Academic Ranking and Excellence whose aim is the improvement of the quality of academic rankings and quality of higher education.

PERSPEKTYWY Education Foundation

31 Nowogrodzka Str., 00-511 Warsaw, Poland www.perspektywy.org

IREG Observatory on Academic Ranking and Excellence

rue Washington 40 1050 Brussels, Belgium www.ireg-observatory.org

© IREG Observatory on Academic Ranking and Excellence This publication is based on information made available by ranking organizations. The publisher has made every effort to ensure the accuracy and completeness of the information contained in this publication, however, it takes no responsibility for any errors or omissions. The information listed is subject to change.

Edited by Waldemar Siwinski and Perspektywy Education Foundation team **DTP:** Artur Zebrowski, Karolina Sitnicka

This publication is available at www.ireg-observatory.org/en/inventory-international-rankings

Warsaw 2018

ISBN: 978-83-61239-92-5

Executive summary

IREG Observatory on Academic Ranking and Excellence initiated a project called "IREG Inventory of International University Rankings (Global and Regional)" as a part of its statutory mission. IREG Observatory aim is the improvement of the quality of academic rankings and the quality of higher education in general. Consequently, it is interested in gathering information on all relevant ranking activities in the field of higher education.

In order to augment the knowledge on rankings, IREG Observatory has commissioned from the Perspektywy Education Foundation a comprehensive "Inventory of International University Rankings". The Perspektywy Education Foundation has several years of experience in preparing, publishing and refining national university ranking in Poland. A Steering Committee was set up with the task to advice and oversee the project.

The "Questionnaire on international ranking" has been prepared in consultation with members of the IREG Executive Committee and members of Steering Committee. In its final version the questionnaire is compatible with other IREG Observatory documents including the "data sheet" used in applying for the IREG Ranking Audit and the IREG Guidelines for Stakeholders of Academic Rankings project.

The information on collection of data for the inventory has been posted on the IREG Observatory website and e-mails have been sent to institutions, members of the academic community and experts on higher education all over the world. The addresses have been provided by the Perspektywy Education Foundation and IREG Observatory Secretariat. Over 40 answers and questionnaires have been received. Simultaneously, through broad database search 17 rankings have been identified. 45 rankings of this group met the eligibility criteria and have been included into the Inventory. Final verification of the data received has taken place in the fall of 2017.

The first edition of the IREG Inventory of International University Rankings includes those rankings with the latest edition published on or after 2014. In general, only rankings that were published twice have been considered and only those that had their methodology published in English. Regional rankings generated by application of a regional filter to the main ranking are not recognized as an independent, self-standing rankings.

The first edition of the IREG Inventory of University International Rankings contains information on 21 global rankings (including 4 sub rankings), 5 rankings by subject, 9 regional rankings, 8 business school rankings and 2 rankings of national higher education systems.

Being aware that the inventory will be published on the IREG website, rather strict criteria to qualify a ranking have been applied. The authors of the Inventory thought it better to expand the list later rather than publish data they considered not fully reliable.

The rankings that have passed the IREG Ranking Audit and received the certificate have been marked with the "IREG Approved" label.

Due to the fact that changes in international ranking are frequent and substantial, the Inventory of University International Rankings will be updated from time to time. Consequently, on the IREG website you will find two options: "Up-date your ranking" and "Add your ranking". The authors of the Inventory count on members of IREG Observatory and ranking experts to help in keeping the Inventory accurate and up-dated.

TABLE OF CONTENTS

- **3 Executive Summary**
- 4 Table of Contents
- 7 Foreward
- 9 Comments on the classification of rankings

GLOBAL UNIVERSITY RANKINGS

- 12 CWTS Leiden Ranking
- 14 CWUR World University Rankings
- 16 Emerging/Trendence Global University Employability Ranking
- 18 Nature Index
- 20 NTU Ranking
- 22 QS World University Rankings
- 24 Ranking Web of Universities (Webometrics)
- 26 Reuters Top 100: The World's Most Innovative Universities
- 28 RUR Round University Ranking
- 30 SCImago Institutions Ranking
- 32 ShanghaiRanking's Academic Ranking of World Universities (ARWU)
- 34 THE World University Rankings
- 36 U-Multirank
- 38 UI GreenMetric Ranking of World Universities
- 40 uniRank University Ranking™
- 42 URAP University Ranking by Academic Performance
- 44 US News Best Global Universities Rankings

GLOBAL UNIVERSITY SUB-RANKINGS

- 48 QS Graduate Employability Rankings
- 50 **QS Top 50 Under 50**
- 52 THE World Reputation Rankings
- 54 THE Young University Ranking

GLOBAL RANKINGS BY SUBJECT

- 58 QS World University Rankings by Subject
- 60 ShanghaiRanking's Global Ranking of Academic Subjects
- 62 ShanghaiRanking's Global Ranking of Sport Science Schools and Departments
- 64 THE World University Rankings by Subject
- 68 US News Best Global Universities Subject Rankings

TABLE OF CONTENTS

REGIONAL UNIVERSITY RANKINGS

- 70 QS Arab Region University Rankings
- 72 QS Asia University Rankings
- 74 QS BRICS University Rankings
- 76 QS Emerging Europe & Central Asia University Rankings
- 78 QS Latin America University Rankings
- 80 THE Asia University Rankings
- 82 THE BRICS & Emerging Economies Rankings
- 84 THE Latin America University Rankings
- 86 US News Best Arab Region Universities Rankings

BUSINESS SCHOOL RANKINGS

- 90 Bloomberg Businessweek Best Business Schools Ranking
- 92 Business of Fashion Global Fashion School Rankings
- 94 FT European Business School Rankings
- 96 FT Executive MBA Ranking
- 98 FT Global MBA Ranking
- 100 QS Global MBA Rankings
- 102 The Economist Executive MBA Ranking
- 104 The Economist Full time MBA Ranking

NATIONAL HIGHER EDUCATION SYSTEM RANKINGS

- 108 QS Higher Education System Strength Rankings
- 110 U21 Ranking of National Higher Education Systems
- 112 Aneks Questionnaire



Foreword



Waldemar Siwinski
President, Perspektywy
Education Foundation
Vice President,
IREG Observatory

The world of international rankings is in the stage of rapid transformation. More and more rankings are appearing, they cover ever larger number of higher education institutions ("Top-1000" has become standard), they analyze higher education systems deeper (development of the "by subject" rankings), and they are becoming regional. The IREG Observatory on Academic Ranking and Excellence entrusted the Perspektywy Education Foundation with the task to document this phenomenon.

The purpose of the IREG Inventory of International University Rankings is to provide well organized information on the key group of the international university rankings. It is also an indication which rankings the international community of experts and analysts recognize as meeting the criteria of transparency of methodology, credibility in the choice of indicators, data verification, form of publication and readiness to respond to complaints. The proposed classification and its presentation reflects both ever richer and accessible pool of data bases and the diversified needs of various groups of stakeholders.

IREG Inventory of International Rankings should be seen in the context of the previous initiatives aimed at making available to the public a well organized information on academic rankings taken by IREG Observatory such as the Berlin Principles on Ranking of Higher Education Institutions (2006), IREG Ranking Audit Initiative (2009) and IREG Inventory of National Rankings (2014).

As underlined by the IREG Guidelines for Stakeholders of Academic Rankings (2015): "It is one of the fundamental missions of the IREG Observatory to act as a repository of information about rankings and to keep track of the constantly evolving and diverse world of rankings."

In order to make this repository of international rankings comprehensive, useful for the stakeholders and up to date, the Perspektywy Education Foundation has carried a thorough analysis of this steadily growing number of rankings. Fortunately, we were not alone, a group of outstanding experts have helped us in this task.

I would like to express my thanks to the members of the Steering Committee for their valuable advice, especially in darfting of the Questionnaire and in the preparation of the Inventory. The Steering Committee consisted of excellence experts in the field of university rankings: Jan Sadlak (IREG Observatory President), Gero Federkeil (CHE, Germany), Nian Cai Liu (ShanghaiRanking Consultancy, China), Mukash Burkitbayev (Al-Farabi University in Almaty, Kazakhstan), Gyorgy Fabri (Eotvos Lorand University in Budapest, Hungary) and Daniel J. Guhr (Illuminate Consulting Group, USA).

Special thanks are also due to Richard Holmes with whom I have corresponded in order to clarify the specifics of particular rankings, their methodology and in trying to solve occurring problems of classification. Richard is a true "gold mine" of knowledge on rankings and his comments have had significant effect on the shape and content of the Inventory. However, myself and my colleagues from the Perspektywy Education Foundation take the responsibility for the final version of the IREG Inventory of International Rankings (including inevitable mistakes and omissions). We will be happy to consider with due attention any comments or remarks regarding the Inventory.

Comments on the classification of rankings

What constitutes a ranking?

The growing popularity of academic rankings has led to the overuse of the term "ranking". Therefore, we needed to define ranking for the IREG Inventory of International Rankings. To do so, we refered to the IREG Guidelines for Stakeholders of Academic Rankings" (2015). The Guidelines state that:

"Academic ranking" is a numerical assessment of the performance of a program, activity, institution or system of higher education, based on an agreed upon methodology.

One-dimensional rankings assess performance according to one set of indicators, with a specific weight attached to each given indicator.

Multi-dimensional rankings provide a series of score-tables rather than just one overall table. This allows users to weigh indicators according to their own preferences and to construct personalized rankings".

Therefore, a list of institutions based on a single indicator is not considered a ranking. A "ranking" requires a set of at least two indicators with assigned percentage weight (there are cases, however, that stakeholders assign the weights themeselves). The choice of indicators and their weights reflect the concept of quality of institutions or programs the authors have chosen for their ranking.

What rankings are included?

The authors of the project faced the task of defining what rankings should be included in the Inventory. To be included in the Inventory rankings had to meet the following criteria:

- · include two or more indicators or criteria
- at least one indicator or metric that measures or is related to academic quality
- published at least twice
- published since 2014
- · transparent methodology published in English
- results accessible on the Internet.

In recent years some ranking organizations have published specialised rankings of new universities, graduate employability or reputation that are wholly or partly based on data extracted from the global rankings or ratings. Rankings where a significant part of the total weighting of indicators is derived from a "parent ranking" are classified in the Inventory as "sub-rankings"

Regional rankings generated by application of a regional filter to the main ranking are not considered independent rankings. The regional rankings included in the Inventory either use recalibrated indicators from the global rankings or combine those indicators with new ones.

Rankings "by subject"

Rankings "by subject" have become a significant trend in the ranking world. They often cover a large number of "subjects" and represent a distinctive methodology. As these rankings are valued by stakeholders, we put them into a separate group.

Please note: the Inventory does not include "broad field" or "broad subject area" rankings. Even if they are published separately, they a part of an independent ranking. They cover very broad areas such as Natural Sciences, Arts & Humanities, Medicine, Engineering and Technology, Social Sciences and Life Sciences. The authors of the Inventory believe that due to the development of rankings "by subject" the significance of these "broad fields" rankings is likely to diminish.

Rankings of business schools

For a group of stakeholders interested in education in the field of business management, rankings of MBA and business schools are of particular interest. In the methodology of these rankings, indicators related to the "market value" of education play a particularly important role. For this reason, these rankings are in a separate group.

Rankings of higher education systems

The Inventory also includes rankings of national higher education systems. These rankings provide an important background that helps understand and properly interpret rankings of institutions and programs presented in the Inventory.

IREG Inventory of International University Rankings

GLOBAL UNIVERSITY RANKINGS

CWTS Leiden Ranking

CWUR World University Rankings

Emerging/Trendence Global University Employability Ranking

Nature Index

NTU Ranking

QS World University Rankings

Ranking Web of Universities (Webometrics)

Reuters Top 100: The World's Most Innovative Universities

RUR Round University Ranking

SCImago Institutions Ranking

ShanghaiRanking's Academic Ranking of World Universities (ARWU)

THE World University Rankings

U-Multirank

UI GreenMetric Ranking of World Universities

uniRank University Ranking™

URAP University Ranking by Academic Performance

US News Best Global Universities Rankings

CWTS Leiden Ranking

■ Information on ranking

Name of the ranking:	CWTS Leiden Ranking	
Geographical scope:	global	
Status of the ranking:	autonomous / independent ranking	
Name of person in charge of ranking:	Ludo Waltman	
E-mail of person in charge of ranking:	waltmanlr@cwts.leidenuniv.nl	
Website of the ranking:	www.leidenranking.com	
Publication frequency:	annual	
First year of publication:	2008	Most recent year of publication: 2017
Type of publication:	internet	
Internet users access to ranking:	open access	
Main target groups:	higher education institutions	
	policymakers, governments and funding agencies	
Level of comparison:	broad fields: 5	
	institutional: 903	
Major dimensions covered:	internationalization	
	research	
Structure of presentation:	standard presentation (league tables)	
	chart	
Data sources:	third-party database (Web of Science)	
Quality assurance of ranking:	principles for responsible use	
Website of the methodology:	www.leidenranking.com/information	

Name of the ranking organization:	Centre for Science and Technology Studies, Leiden University
Address:	Wassenaarseweg 62A, Leiden, The Netherlands
Website of the ranking organization:	www.cwts.nl
Type of organization:	university/higher education institution



CWTS Leiden Ranking

■ Methodology

The **CWTS Leiden Ranking 2017** is based on publications in Clarivate Analytics' Web of Science database (Science Citation Index Expanded, Social Sciences Citation Index, and Arts & Humanities Citation Index) in the period 2012–2015. Book publications, publications in conference proceedings, and publications in journals not indexed in Web of Science are not included. Only so-called core publications are included, which are publications in international scientific journals. In addition, only publications of the Web of Science document types article and review are considered.

IMPACT INDICATORS

The Leiden Ranking offers the following indicators of scientific impact:

P(top 1%) and PP(top 1%). The number and the proportion of a university's publications that, compared with other publications in the same field and in the same year, belong to the top 1% most frequently cited.

P(top 10%) and PP(top 10%). The number and the proportion of a university's publications that, compared with other publications in the same field and in the same year, belong to the top 10% most frequently cited.

P(top 50%) and PP(top 50%). The number and the proportion of a university's publications that, compared with other publications in the same field and in the same year, belong to the top 50% most frequently cited.

TCS and MCS. The total and the average number of citations of the publications of a university.

TNCS and MNCS. The total and the average number of citations of the publications of a university, normalized for field and publication year. An MNCS value of two for instance means that the publications of a university have been cited twice above the average of their field and publication year.

Citations are counted until the end of 2016 in the calculation of the above indicators. Author self citations are excluded. All indicators except for TCS and MCS are normalized for differences in citation practices between scientific fields. For the purpose of this field normalization, about 4000 fields are distinguished. These fields are defined at the level of individual publications.

COLLABORATION INDICATORS

The following indicators of scientific collaboration are provided in the Leiden Ranking:

P(collab) and PP(collab). The number and the proportion of a university's publications that have been co-authored with one or more other organizations.

P(int collab) and PP(int collab). The number and the proportion of a university's publications that have been co-authored by two or more countries.

P(industry) and PP(industry). The number and the proportion of a university's publications that have been co-authored with one or more industrial organizations.

P(<100 km) and PP(<100 km). The number and the proportion of a university's publications with a geographical collaboration distance of less than 100 km, where the geographical collaboration distance of a publication equals the largest geographical distance between two addresses mentioned in the publication's address list.

P(>5000 km) and PP(>5000 km). The number and the proportion of a university's publications with a geographical collaboration distance of more than 5000 km.

CWUR World University Rankings

■ Information on ranking

Name of the ranking: Geographical scope: Status of the ranking: Name of person in charge of ranking: E-mail of person in charge of ranking: Website of the ranking: Publication frequency: First year of publication: Internet users access to ranking: CWUR World University Rankings global Nadim Mahassen President@cwur.org www.cwur.org annual Most recent year of publication: 2012 Most recent year of publication: Internet users access to ranking: Open access
Status of the ranking: Name of person in charge of ranking: E-mail of person in charge of ranking: Website of the ranking: Publication frequency: First year of publication: Type of publication: Internet users access to ranking: autonomous/independent ranking Nadim Mahassen president@cwur.org www.cwur.org annual 2012 Most recent year of publication: 2017 Internet users access to ranking: Autonomous/independent ranking
Name of person in charge of ranking: E-mail of person in charge of ranking: Website of the ranking: Publication frequency: First year of publication: Type of publication: Internet users access to ranking: Nadim Mahassen president@cwur.org www.cwur.org annual 2012 Most recent year of publication: 2017 Internet users access to ranking: Open access
E-mail of person in charge of ranking: Website of the ranking: Publication frequency: First year of publication: Type of publication: Internet users access to ranking: president@cwur.org www.cwur.org Annual Most recent year of publication: 2012 Most recent year of publication: open access
Website of the ranking: Publication frequency: annual First year of publication: Type of publication: Internet users access to ranking: www.cwur.org annual Most recent year of publication: 2017 Internet users access to ranking: open access
Publication frequency: annual First year of publication: Type of publication: Internet users access to ranking: annual Most recent year of publication: 2017 internet open access
First year of publication: 2012 Most recent year of publication: 2017 Type of publication: internet Internet users access to ranking: open access
Internet users access to ranking: open access
·
Main target groups: higher education institutions
students and parents
policymakers, governments and funding agencies
Level of comparison: fields or subject: 227
institutional: 1000
Major dimensions covered: employability
innovation
research
teaching
Structure of presentation: standard presentation (league tables)
Data sources: third-party database (data not provided by HEI)
other: www.forbes.com/global2000; www.wipo.int
Quality assurance of ranking: advisory board
Website of the methodology: http://cwur.org/methodology/preprint.pdf

Name of the ranking organization:	The Center for World University Rankings (CWUR)
Address:	Center for World University Rankings;
	Business Park, RAK Economic Zone P.O. Box 36726; United Arab Emirates
Website of the ranking organization:	www.cwur.org
Type of organization:	private, non-profit



CWUR World University Rankings

Methodology

The **Center for World University Rankings (CWUR)** publishes the global university ranking that measures the quality of education and training of students as well as the prestige of the faculty members and the quality of their research without relying on surveys and university data submissions. CWUR World University Rankings uses eight indicators to rank the world's top 1000 universities:

Quality of Education (25%)

Measured by the number of a university's alumni who have won major international awards, prizes, and medals relative to the university's size.

Alumni Employment (25%)

Measured by the number of a university's alumni who have held CEO positions at the world's top companies relative to the university's size.

Quality of Faculty (25%)

Measured by the number of academics who have won major international awards, prizes, and medals.

Publications (5%)

Measured by the number of research papers appearing in reputable journals.

Influence (5%)

Measured by the number of research papers appearing in highly-influential journals.

Citations (5%)

Measured by the number of highly-cited research papers.

Broad Impact (5%)

Measured by the university's h-index.

Patents (5%)

Measured by the number of international patent filings.

The Center for World University Ranking has published also for the first time the CWUR Rankings by Subject 2017 comprising 227 subject categories (10 universities in every subject), based on the number of research articles in top-tier journals. Data is obtained from Clarivate Analytics data bases.

Emerging/Trendence Global University Employability Ranking

■ Information on ranking

Name of the ranking:	Emerging/Trendence Global University Employability Ranking	
Geographical scope:	global	
Status of the ranking:	autonomous / independent ranking	
Name of person in charge of ranking:	Laurent Dupasquier	
E-mail of person in charge of ranking:	laurent.dupasquier@emerging.fr	
Website of the ranking:	www.trendence.com/en/partners/universities/university-employability-ranking.html	
Publication frequency:	annual	
First year of publication:	2010	Most recent year of publication: 2017
Type of publication:	internet	
Internet users access to ranking:	open access	
Main target groups:	employers	
	higher education institutions students and parents	
Level of comparison:	institutional: 150	
Major dimensions covered:	employability	
Structure of presentation:	standard presentation (league tables)	
Data sources:	third party database: Trendence employers database	
Website of the methodology:	www.emerging.fr	

Name of the ranking organization:	Emerging
Address:	57 rue de l'Abbé Groult, 75015 Paris, France
Website of the ranking organization:	www.emerging.fr
Type of organization:	commercial/for-profit



Emerging/Trendence Global University Employability Ranking

Methodology

The **Emerging/Trendence Global University Employability Ranking**, designed by the French human resources consultancy Emerging, conducted by German research institute Trendence and published exclusively by British Times Higher Education, reveals which universities the recruiters at top companies think are the best at preparing students for the workplace.

To produce the Global University Employability Ranking, an online survey was completed by two panels of participants between May and September 2017.

Both panels included respondents from 22 countries: Argentina, Australia, Austria, Brazil, Canada, China, Germany, Spain, France, Israel, India, Japan, Korea, Mexico, Netherlands, Singapore, South Africa, Turkey, United Kingdom (UK), United Arab Emirates (UAE), United States of America (USA).

The first panel consisted of 2500 recruiters at a management level who had experience of hiring or working with graduates. Each person was given a list of local universities (with the option to add more) and had up to 15 votes to cast for the "universities in (their) country (that) produce the best graduates in terms of employability". The sample size of recruiters from each country was determined by the country's number of university students, GDP and number of institutions.

Participants with experience recruiting internationally were also asked to select from a global list of universities that they considered "the best in the world when it comes to graduate employability".

The second panel consisted of 3500 managing directors of international companies. Participants could cast a maximum of 10 votes on both the local and global lists of universities that had been produced by the first panel. They could also add universities from a database.

Votes were then aggregated into scores for each university to produce the ranking.

Most participants had at least 10 years' experience in the workplace and worked at a firm with more than 500 employees. More than 30 per cent had experience recruiting in the business sector, just under 30 per cent had experience in the IT sector, and almost 20 per cent worked in the engineering industry. More than half recruited internationally.

Nature Index

■ Information on ranking

graphical scope:	alobal		
	global		
us of the ranking:	autonomous / independent ranking		
ne of person in charge of ranking:	Aaron Ballagh		
ail of person in charge of ranking:	aaron.ballagh@nature.com		
osite of the ranking:	www.natureindex.com/annual-tables/2017/institution/academic/all		
lication frequency:	annual		
	tables based on a 12	2-month rolling window of data, which is updated mor	nthly
year of publication:	2014	Most recent year of publication: 2017	
e of publication:	internet		
rnet users access to ranking:	open access		
n target groups:	higher education institutions		
	policymakers, governments and funding agencies		
el of comparison:	broad fields: 4		
	institutional: 500 sectors: (corporate, government, healthcare, NPO/NGO); countries and regions		
or dimensions covered:	research		
	collaboration in high-quality natural science journals		
cture of presentation:	multi-indicator ranking		
	standard presentation (league tables)		
a sources:	68 high-impact publications analysed by Nature		
lity assurance of ranking:	advisory board		
osite of the methodology:	www.natureindex.com		

■ Information on ranking organization

Name of the ranking organization:	Macmillan Publishers Limited (part of Springer Nature Group)
Addres:	The Campus, 4 Crinan Street, London, N1 9XW, United Kingdon
Website of the ranking organization:	www.nature.com
Type of organization:	commercial/for-profit

natureINDEX

Nature Index

Methodology

The **Nature Index** is a database of research articles published in high impact scientific journals chosen by an independent panel of experts. It publishes international tables and national supplements.

The 68 journals included into the Nature Index represent less than 1% of the journals covering natural sciences in the Web of Science (Clarivate Analytics) but account for close to 30% of total citations in natural science journals.

Each year, the Nature Index publishes league tables based on counts of high-quality research outputs in the previous calendar year. The 2017 tables are based on Nature Index data from 1 January 2016 to 31 December 2016.

Article output is counted in three ways:

Article count (AC) - where a count of one is assigned to an institution or country if one or more authors of the research article are from that institution or country, regardless of how many co-authors there are from outside that institution or country.

Fractional count (FC) - that takes into account the percentage of authors from that institution (or country) and the number of affiliated institutions per article. For calculation of the FC, all authors are considered to have contributed equally to the article. The maximum combined FC for any article is 1.0.

Weighted fractional count (WFC) - a modified version of FC in which fractional counts for articles from specialist astronomy and astrophysics journals have been down weighted. These journals encompass a much larger proportion of the total publication output of these fields than any other field covered by the Nature Index. The WFC allows ordering of institutions and countries so as not to give undue emphasis to these fields. The weighting is achieved by multiplying the fractional count from these astronomy and astrophysics journals by a factor of 0.2. This down weighting is in proportion to an approximation of the level to which astronomy and astrophysics articles are overrepresented compared to the total publication output of other fields covered by the Nature Index.

Universities included into league table "Nature Index 2017: Institutions - academic" are counted according WFC method.

NTU Ranking

■ Information on ranking

Name of the ranking:	NTU Ranking - National Taiwan University Performance Ranking	
	of Scientific Papers for World Universities	
Geographical scope:	global	
Status of the ranking:	autonomous / independent ranking	
Name of person in charge of ranking:	Mu-Hsuan Huang	
E-mail of person in charge of ranking:	mhhuang@ntu.edu.tw	
Website of the ranking:	http://nturanking.lis.ntu.edu.tw	
Publication frequency:	annual	
First year of publication:	2007 Most recent year of publication: 2017	
Type of publication:	internet	
Internet users access to ranking:	open access	
Main target groups:	higher education institutions	
	policymakers, governments and funding agencies quality assurance, accreditation, and recognition organizations	
Level of comparison:	broad fields: 6	
	fields or subject: 14	
	institutional: 800	
Major dimensions covered:	research	
Structure of presentation:	standard presentation (league tables)	
Data sources:	third-party database (data not provided by HEI)	
	Clarivate Analytics: Science Citation Index (SCI)	
	Social Sciences Citation Index (SSCI)	
Quality assurance of ranking:	periodic consultancy	
Website of the methodology:	http://nturanking.lis.ntu.edu.tw/BackgroundMethodology/Methodology-enus.aspx	

■ Information on ranking organization

Name of the ranking organization:	Department of Library and Information Science, National Taiwan University
Address:	Dept. LIS, NTU, No.1, Sec.4, Roosevelt Road, Taipei 10617, Taiwan (R.O.C)
Website of the ranking organization:	www.lis.ntu.edu.tw/english
Type of organization:	university/higher education institution

NTU Ranking

NTU Ranking

■ Methodology

NTU Ranking - National Taiwan University Performance Ranking of Scientific Papers for World Universities is based on 8 indicators, divided into 3 criteria.

RESEARCH PRODUCTIVITY (25%)

To represent a university's current and on-going research productivity, NTU Ranking 2017 employs two indicators: the number of articles in the last 11 years (2006-16), and the number of articles in the current year (2016).

Number of articles in the last 11 years (10%) draws data from ESI, which includes 2006-16 statistics articles published in journals indexed by SCI and SSCI.

Number of articles in the current year (15%) relies on the 2016 data obtained from SCI and SSCI.

RESEARCH IMPACT (35%)

The number of citations of a particular academic article within a specific time frame is a commonly accepted indicator for that article's impact. NTU Ranking considers both the long-term and short-term impact of a particular research and seeks to provide a fairer representation of a university's research impact regardless of its size or faculty number. Thus, this ranking system measures research impact by the number of citations in the last 11 years, the number of citations in the last 2 years, and the average number of citations in the last 11 years.

Number of citations in the last 11 years (15%) draws 2006-16 citation statistics from ESI.

Number of citations in the last 2 years (10%) draws 2015-16 citation statistics from SCI and SSCI in WOS, which include citation statistics updated to the dates of retrieval.

Average number of citations in the last 11 years (10%) is the number of citations in the last 11 years (2006-16) divided by the number of articles in the last 11 years.

RESEARCH EXCELLENCE (40%)

This ranking system assesses each university's research excellence by the following indicators: the h-index of the last 2 years, the number of Highly Cited Papers from ESI, and the number of articles in the current year in high-impact journals (Hi-Impact journal articles).

h-index of the last 2 years (10%) measures both the quantity and quality of a university's research via the use of the 2015-16 SCI and SSCI data.

Number of Highly Cited Papers (15%) utilizes data from ESI, which includes statistics of "Highly Cited Papers" from 2006 to 2016. ESI defines Highly Cited Papers as SCI/SSCI-indexed papers that are cited most (in the top 1% of the total papers indexed in the same year) within the last 11 years.

Number of articles in the current year in high-impact journals (15%) employs data from JCR, which supplies the impact factor of each journal in its subject field. The impact factor of a journal is the number of citations of the papers published in that particular journal within the previous two years divided by the number of that journal's papers within the previous two years. NTU Ranking defines high-impact journals as those whose impact factors are ranked in the top 5% of the total journals within a specific subject category.

QS World University Rankings

■ Information on ranking

Name of the ranking:	QS World University Rankings	
Geographical scope:	global	
Status of the ranking:	autonomous/independent ranking	
Name of person in charge of ranking:	Ben Sowter	
E-mail of person in charge of ranking:	ben@qs.com	
Website of the ranking:	www.topuniversities.com/university-rankings/world-university-rankings	
Publication frequency:	annual	
First year of publication:	2004	Most recent year of publication: 2017
Type of publication:	internet	
	mobile application	
	print - special publicat	tion: QS Report
Internet users access to ranking:	open access	
Main target groups:	employers	
	higher education institutions	
	students and parents	
Level of comparison:	institutional: 916	IDE(1
Major dimensions covered:	students and parents institutional: 916 employability internationalization reputation	
	internationalization	PPROVE
	reputation	AFT
	research	
	teaching	
Structure of presentation:	standard presentation (league tables)	
Data sources:		
	survey conducted exc	clusively by ranking organization
	third-party database:	Scopus
Quality assurance of ranking:	advisory board	
	certification	
Website of the methodology:	www.topuniversities.c	com/qs-world-university-rankings/methodology

Name of the ranking organization:	Quacquarelli Symonds Ltd (QS)
Address:	London Main Office, 1 Tranley Mews, Fleet Road London, NW3 2DG
Website of the ranking organization:	www.topuniversities.com/about-qs
Type of organization:	commercial/for-profit



QS World University Rankings

Methodology

The **QS World University Rankings®** are designed to help prospective students make informed comparisons of leading universities around the world. Based on six performance indicators, the ranking assesses university performance across four areas: research, teaching, employability and internationalization. Each of the six indicators carries a different weighting when calculating the overall scores (see below). Four of the indicators are based on 'hard' data, and the remaining two are based on major global surveys – one of academics and another of employers – each the largest of their kind.

Academic reputation (40%)

Academic reputation is measured using a global survey, in which academics are asked to identify the institutions where they believe the best work is currently taking place within their own field of expertise. The aim is to give prospective students a sense of the consensus of opinion within the international academic community. For the 2016-17 edition, a total of 74,651 academics contributed. Regional weightings are applied to counter any discrepancies in response rates.

Employer reputation (10%)

The employer reputation indicator is also based on a global survey, this time asking employers to identify the universities they perceive to be producing the best graduates. This indicator is unique among international university rankings. Its purpose is to give students a better sense of how universities are viewed in the graduate jobs market. A higher weighting is given to votes for universities that come from employers based in other countries, so this indicator is especially useful for prospective students seeking to identify institutions with a reputation that extends beyond their national borders. The 2016-17 edition draws on responses from 37,781 graduate employers.

Student-to-faculty ratio (20%)

This is a simple measure of the number of academic staff employed relative to the number of students enrolled. In the absence of an international standard by which to measure teaching quality, this indicator aims to identify the universities that are best equipped to provide small class sizes and a good level of individual supervision.

Citations per faculty (20%)

This indicator aims to assess universities' research impact. A 'citation' means a piece of research being cited (referred to) within another piece of research. Generally, the more often a piece of research is cited, the more influential it is. So the more highly cited research papers a university publishes, the stronger its research output is considered. QS collects this information using Scopus, the world's largest database of research abstracts and citations. The latest five complete years of data are used, and the total citation count is assessed in relation to the number of academic faculty members at the university, so that larger institutions do not have an unfair advantage. For the 2016-17 rankings, QS analyzed 10.3 million research papers and 66.3 million citations.

International faculty ratio (5%); international student ratio (5%)

The last two indicators aim to assess how successful a university has been in attracting students and academics from other nations. This is based on the proportion of international students and faculty members at the institution. Each of these indicators contributes 5% to the overall ranking results.

Ranking Web of Universities (Webometrics)

■ Information on ranking

Name of the ranking:	Ranking Web of Univers	Ranking Web of Universities (Webometrics)	
Geographical scope:	global		
Status of the ranking:	autonomous/independe	autonomous / independent ranking	
Name of person in charge of ranking:	Isidro F. Aguillo		
E-mail of person in charge of ranking:	isidro.aguillo@csic.es		
Website of the ranking:	www.webometrics.info/er	n/world	
Publication frequency:	semiannual		
First year of publication:	2004	Most recent year of publication: 2017	
Type of publication:	internet		
Internet users access to ranking:	open access		
Main target groups:	employers		
	higher education institut	ions	
	policymakers, governme	ents and funding agencies	
	quality assurance, accreditation, and recognition organizations students and parents		
Level of comparison:	institutional: 27.500		
Major dimensions covered:	employability	innovation	
	internationalization	knowledge transfer	
	regional engagement	reputation	
	research	social engagement	
	teaching	web presence	
Structure of presentation:	standard presentation (league tables)		
Data sources:	third-party database (data not provided by HEI): Google Scholar, Scimago		
	other: Google, Majestic, Ahrefs		
Quality assurance of ranking:	advisory board		
Website of the methodology:	www.webometrics.info/en/Methodology		

Name of the ranking organization:	Instituto de Políticas y Bienes Públicos,
	Consejo Superior de Investigaciones Científicas
Address:	Albasanz, 26-28. Madrid 28037. Madrid
Website of the ranking organization:	www.ipp.csic.es
Type of organization:	Public research organization



Ranking Web of Universities (Webometrics)

Methodology

The **Ranking Web of Universities** or **Webometrics** is published twice a year (data is collected during the first weeks of January and July and published at the end of each month) and consists of two groups ofindicators (ratic 1:1 between activity and impact measurements). The activity group (50%) consists of the following indicators: Presence, Transparency and Excellence. The impact group consists only of the visibility indicator. Description and sources follow:

PRESENCE (5%)

Size (number of pages) of the main webdomain of the institution. It includes all the subdomains sharing the webdomain and all the file types including rich files like pdf. documents. *Source*: Google.

VISIBILITY (50%)

Number of external networks (subnets) originating backlinks to the institutions webpages. After normalization, the maximum value between the two sources is selected. *Source:* Ahrefs, Majestic.

TRANSPARENCY or OPENNESS (10%)

Number of citations from Top authors according to the source. Source: Google Scholar Citations.

EXCELLENCE or SCHOLAR (35%)

Number of papers amongst the top 10% most cited in 26 disciplines. Data for the five year period (2011-2015). *Source:* Scimago.

From ranking website:

The original aim of the Ranking is to promote academic web presence, supporting the Open Access initiatives for increasing significantly the transfer of scientific and cultural knowledge generated by the universities to the whole Society. In order to achieve this objective, the publication of rankings is one of the most powerful and successful tools for starting and consolidating the processes of change in the academia, increasing the scholars' commitment and setting up badly needed long term strategies

Webometrics only publish a unique Ranking of Universities in every edition. The combination of indicators is the result of a careful investigation and it is not open to individual choosing by users without enough knowledge or expertise in this field. Webometrics is continuously researching for improving the ranking, changing or evolving the indicators and the weighting model to provide a better classification.

Webometrics also measure, in an indirect way, other missions like teaching or the so-called third mission, considering not only the scientific impact of the university activities, but also the economic relevance of the technology transfer to industry, the community engagement (social, cultural, environmental roles) and even the political influence.

Reuters Top 100:

The World's Most Innovative Universities

■ Information on ranking

Name of the ranking:	Reuters Top 100: The World's Most Innovative Universities	
Geographical scope:	global	
Status of the ranking:	autonomous / independent ranking	
Website of the ranking:	www.reuters.com/innovative-universities-2017	
Publication frequency:	annual	
First year of publication:	2015	Most recent year of publication: 2017
Type of publication:	internet	
Internet users access to ranking:	open access	
Main target groups:	employers	
	higher education institutions	
	policymakers, governr	ments and funding agencies
Level of comparison:	institutional: 100	
Major dimensions covered:	innovation	
Structure of presentation:	standard presentation (league tables)	
Data sources:	third-party database: Thomson Reuters Intellectual	
	Property & Science and several of its research platforms:	
	InCites, Web of Science, Derwent Innovations Index, Derwent World Patents	
	Index and Patents Cita	ation Index
Website of the methodology:	www.reuters.com/innovative-universities-2017/methodology	

Name of the ranking organization:	Reuters News
Address:	New York, USA
Website of the ranking organization:	www.reuters.com
Type of organization:	commercial/for-profit



Reuters Top 100:

The World's Most Innovative Universities

■ Methodology

Reuters Top 100: The World's Most Innovative Universities Ranking uses data prepared by Clarivate Analytics and derived from the following databases: InCites, Web of Science, Derwent Innovations Index, Derwent World Patents Index, and the Patents Citations Index. Ranking is based on 10 indicators.

Patent Volume (11.1%) - The number of basic patents (patent families) filed by the organization. This is an indication of research output that has a potential for commercial value. *Source:* Derwent World Patents Index, Derwent Innovations Index.

Patent Success (11.1%) - The ratio of patent applications to grants over the assessed timeframe. This indicates the university's success in filing applications that are then accepted. *Source:* Derwent World Patents Index, Derwent Innovations Index.

Global Patents (11.1%) - The percentage of patents for which coverage was sought with the U.S., European and Japanese patent offices. Filing an international patent is an expensive and laborious process and filing in multiple countries or regions is an indication that the invention is considered to be nontrivial and has commercial value. *Source:* Derwent World Patents Index, Derwent Innovations Index.

Patent Citations (11.1%) - The total number of times a patent has been cited by other patents. The number of times a patent has been cited is an indication that it has an impact on other commercial R&D. *Source:* Patents Citation Index.

Patent Citation Impact (5.6%) - This is an indication of how much impact a patent has had. Because it is a ratio (or average), it is not dependent on the size of the organization. *Source:* Patents Citation Index

Percent of Patents Cited (5.6%) - This indicator is the proportion of patents that have been cited by other patents one or more times. It is closely tied to the Patent Citation Impact indicator. *Source:* Patents Citation Index.

Patent to Article Citation Impact (11.1%) - This indicator measures the average number of times a journal article has been cited by patents. *Source*: Patents Citation Index, Derwent World Patents Index, Web of Science Core Collection.

Industry Article Citation Impact (11.1%) - Article-to-article citations are an established indicator of influence and research impact. By limiting the citing articles only to those from industry, this indicator reveals the influence and impact that basic research conducted in an academic setting has had on commercial research. *Source:* Web of Science Core Collection.

Percent of Industry Collaborative Articles (11.1%) - The percentage of all articles of a university that contain one or more co-authors from a commercial entity. This indicator shows the percentage of research activity that is conducted in collaboration with industry, suggesting potential future economic impact of the research project jointly undertaken. *Source:* Web of Science Core Collection.

Total Web of Science Core Collection Papers (11.1%) - The total number of journal articles published by the organization. This is a size-dependent measure of the research output of the university. *Source:* Web of Science Core Collection.

RUR Round University Ranking

■ Information on ranking

Name of the ranking:	RUR Round University Ranking	
Geographical scope:	global	
Status of the ranking:	autonomous/independent ranking	
Name of person in charge of ranking:	Oleg Solovyev	
E-mail of person in charge of ranking:	o.solovyev@roundranking.com	
Website of the ranking:	http://roundranking.com	
Publication frequency:	annual	
First year of publication:	2010 Most recent year of publication: 2017	
Type of publication:	internet	
Internet users access to ranking:	open access	
Main target groups:	higher education institutions	
	policymakers, governments and funding agencies	
	students and parents	
Level of comparison:	broad fields: 6	
	institutional: 930	
Major dimensions covered:	internationalization	
	reputation	
	research	
	teaching	
Structure of presentation:	standard presentation (league tables)	
Data sources:	third-party database: Clarivate Analytics	
Quality assurance of ranking:	advisory board	
Website of the methodology:	http://roundranking.com/methodology/methodology.html	

Name of the ranking organization:	RUR Rankings Agency
Address:	Russia, Moscow 115191, 2nd Roshchinskaya St., 4
Website of the ranking organization:	www.rur-agency.com
Type of organization:	commercial/for-profit



RUR Round University Ranking

Methodology

The **RUR Round University Ranking** is published by the RUR Ranking Agency based in Moscow, Russia. All raw data for ranking is provided by Clarivate Analytics. RUR Ranking use 20 indicators grouped into four areas:

TEACHING (40%)

Academic staff per students (8%) - Academic staff and students are calculated as reduced to the full time equivalent (for academic staff) or to the standard workload of the full-time student.

Academic staff per bachelor degrees awarded (8%)

Doctoral degrees awarded per academic staff (8%)

Doctoral degrees awarded per bachelor degrees awarded (8%)

World teaching reputation (8%) - Indicator is based on the Academic Reputation Survey conducted by Clarivate Analytics. A respondent is asked to select up to 15 universities, which he/she considers the most powerful in teaching.

RESEARCH (40%)

Citations per academic and research staff (8%) - The number of citations in a two-year-period is divided by the number of publications per year.

Doctoral degrees awarded per admitted PhD (8%)

Normalized citation impact (8%) - Normalized Citation Impact (NCI) connects the current average citations of a given institution compared with world average citation of the same year, subject area and publication type.

Papers per academic and research staff (8%) - This indicator reflects the level of scientific productivity of the organization that is the ratio of the number of publications to the number of teachers and researchers.

World research reputation (8%) - Indicator is based on the Academic Reputation Survey conducted by Clarivate Analytics. Participation in the survey is possible only by invitation.

INTERNATIONAL DIVERSITY (10%)

Share of international academic staff (2%)

Share of international students (2%)

Share of international co-authored papers (2%)

Reputation outside region (2%) - This indicator shows the reputation of the institution outside the geographical region of the university's location. The average value (the number of respondents' votes) of reputation in both Teaching and Research outside the region is taken into account.

International level (2%) - The average score of the four INTERNATIONAL DIVERSITY indicators.

FINACIAL SUSTAINABILITY (10%)

Institutional income per academic staff (2%)

Institutional income per students (2%)

Papers per research income (2%) - The period of accounting for publications is 5 years (2010-14 for ranking 2017).

Research income per academic and research staff (2%)

Research income per institutional income (2%) - The indicator shows the ratio of the research budget to the gross volume of the organization's budget.

SCImago Institutions Ranking

■ Information on ranking

Name of the ranking:	SCImago Institutions Ranking		
Geographical scope:	global		
Status of the ranking:	autonomous/independent ranking		
E-mail of person in charge of ranking:	getintouch@scimagolab.com		
Website of the ranking:	www.scimagoir.com/rankings.php?sector=Higher%20educ.		
Publication frequency:	annual		
First year of publication:	2009	Most recent year of publication:	2017
Type of publication:	internet		
Internet users access to ranking:	open access		
Main target groups:	employers		
	higher education instit	utions	
	policymakers, governr	nents and funding agencies	
	quality assurance, acc	reditation, and recognition organizations	
Level of comparison:	institutional: 2966		
Major dimensions covered:	innovation		
	knowledge transfer		
	research		
	social engagement		
	web presence		
Structure of presentation:	standard presentation (league tables)		
Data sources:	third-party database: Elseviers' Scopus		
	other: PATSTAT, Goo	gle, Ahrefs	
Quality assurance of ranking:	advisory board		
	periodic consultancy		
Website of the methodology:	www.scimagoir.com/m	ethodology.php	

Name of the ranking organization:	Scimago Lab
Address:	Madrid, Spain
Website of the ranking organization:	www.scimagolab.com
Type of organization:	commercial/for-profit



SCImago Institutions Ranking

■ Methodology

The **SCImago Institutions Rankings (SIR)** is a classification of academic and research-related institutions ranked by a composite indicator that combines three different groups of indicators based on research performance, innovation output and societal impact measured by their web visibility. This three groups are consist of 12 indicators.

RESEARCH (50%)

Output (8%) - Total number of documents published in scholarly journals indexed in Scopus.

International Collaboration (2%) - Institution's output produced in collaboration with foreign institutions. The values are computed by analyzing an institution's output whose affiliations include more than one country address.

Normalized Impact (Leadership Output) (13%) - Normalized Impact is computed over the institution's leadership output using the methodology established by the Karolinska Institutet in Sweden where it is named "Item oriented field normalized citation score average". The normalization of the citation values is done on an individual article level. The values (in decimal numbers) show the relationship between an institution's average scientific impact and the world average set to a score of 1, -i.e. a NI score of 0.8 means the institution is cited 20% below world average and 1.3 means the institution is cited 30% above average.

High Quality Publications (2%) - The number of publications that an institution publishes in the most influential scholarly journals of the world. These are those ranked in the first quartile (25%) in their categories as ordered by SCImago Journal Rank (SJRII) indicator.

Excellence (2%) - Excellence indicates the amount of an institution's scientific output that is included in the top 10% of the most cited papers in their respective scientific fields. It is a measure of high quality output of research institutions. **Scientific Leadership (5%)** - Leadership indicates the amount of an institution's output as main contributor, that is, the amount of papers in which the corresponding author belongs to the institution.

Excellence with Leadership (13%) - Excellence with Leadership indicates the amount of documents in Excellence in which the institution is the main contributor.

Scientific talent pool (5%) - Total number of different authors from an institution in the total publication output of that institution during a particular period of time.

INNOVATION (30%)

Innovative Knowledge (25%): Scientific publication output from an institution cited in patents. Based on PATSTAT (www.epo.org).

Technological Impact (5%) - Percentage of the scientific publication output cited in patents. Based on PATSTAT.

SOCIETAL IMPACT (20%)

Web size (5%) - Number of pages associated to the institution's URL according to Google (www.google.com).

Domain's inbound links (15%) - Number of incoming links to an institution's domain according to ahrefs (https://ahrefs.com).

ShanghaiRanking's Academic Ranking of World Universities (ARWU)

■ Information on ranking

Name of the ranking:	ShanghaiRanking's Academic Ranking of World Universities (ARWU)		
Geographical scope:	global		
Status of the ranking:	autonomous / independent ranking		
Name of person in charge of ranking:	Ying Cheng	•	
E-mail of person in charge of ranking:	ycheng@shanghairan	ycheng@shanghairanking.com	
Website of the ranking:	www.shanghairanking.	com/ARWU2017.html	
Publication frequency:	annual		
First year of publication:	2003	Most recent year of publication: 2017	
Type of publication:	internet		
	print - special publicat	print - special publication: ARWU Report	
Internet users access to ranking:	open access		
Main target groups:	higher education institutions		
	policymakers, governments and funding agencies		
	students and parents		
Level of comparison:	institutional: 1500		
Major dimensions covered:	education		
	faculty		
	research		
Structure of presentation:	standard presentation (league tables)		
Data sources:	third-party database: Clarivates Analytics InCites		
	Nobel Prize and Fields Medal laureats		
Quality assurance of ranking:	advisory board		
Website of the methodology:	www.shanghairanking.com/ARWU-Methodology-2017.html		

Name of the ranking organization:	ShanghaiRanking Consultancy
Address:	Room 1206, 955 Jianchuan Road, Minhang District, Shanghai, China
Website of the ranking organization:	www.shanghairanking.com/index.html
Type of organization:	commercial/for-profit



ShanghaiRanking's Academic Ranking of World Universities (ARWU)

■ Methodology

The **ShanghaiRanking's Academic Ranking of World Universities (ARWU)** uses six indicators including the number of alumni and staff winning Nobel Prizes and Fields Medals, number of highly cited researchers selected by Clarivate Analytics, number of articles published in journals of Nature and Science, number of articles indexed in Science Citation Index - Expanded and Social Sciences Citation Index, and per capita performance of a university.

Alumni (10%)

The total number of the alumni of an institution winning Nobel Prizes and Fields Medals. Alumni are defined as those who obtain bachelor, Master's or doctoral degrees from the institution. Different weights are set according to the periods of obtaining degrees. The weight is 100% for alumni obtaining degrees in 2001-2010, 90% for alumni obtaining degrees in 1991-2000, 80% for alumni obtaining degrees in 1981-1990, and so on, and finally 10% for alumni obtaining degrees in 1911-1920. If a person obtains more than one degrees from an institution, the institution is considered once only.

Award (20%)

The total number of the staff of an institution winning Nobel Prizes in Physics, Chemistry, Medicine and Economics and Fields Medal in Mathematics. Staff is defined as those who work at an institution at the time of winning the prize. Different weights are set according to the periods of winning the prizes. The weight is 100% for winners after 2011, 90% for winners in 2001-2010, 80% for winners in 1991-2000, 70% for winners in 1981-1990, and so on, and finally 10% for winners in 1921-1930. If a winner is affiliated with more than one institution, each institution is assigned the reciprocal of the number of institutions. For Nobel prizes, if a prize is shared by more than one person, weights are set for winners according to their proportion of the prize.

HiCi (20%)

The number of Highly Cited Researchers selected by Clarivate Analytics. The Highly Cited Researchers list issued in November 2016 (2016 HCR List as of November 16 2016) was used for the calculation of HiCi indicator in ARWU 2017. Only the primary affiliations of Highly Cited Researchers are considered.

N&S (20%)

The number of papers published in Nature and Science between 2012 and 2016. To distinguish the order of author affiliation, a weight of 100% is assigned for corresponding author affiliation, 50% for first author affiliation (second author affiliation if the first author affiliation is the same as corresponding author affiliation), 25% for the next author affiliation, and 10% for other author affiliations. Only publications of 'Article' type is considered.

PUB (20%)

Total number of papers indexed in Science Citation Index-Expanded and Social Science Citation Index in 2016. Only publications of 'Article' type is considered. When calculating the total number of papers of an institution, a special weight of two was introduced for papers indexed in Social Science Citation Index.

PCP (10%)

The weighted scores of the above five indicators divided by the number of full-time equivalent academic staff.

THE World University Rankings

■ Information on ranking

Name of the ranking:	THE World University Ran	kings	
Geographical scope:	global		
Status of the ranking:	autonomous / independent ranking		
Name of person in charge of ranking:	Phil Baty		
E-mail of person in charge of ranking:	phil.baty@tesglobal.com		
Website of the ranking:	www.timeshighereducation	.com/world-university-rankings/2017	
Publication frequency:	annual		
First year of publication:	2004	Most recent year of publication:	2017
Type of publication:	internet		
	mobile application		
	print - magazine, newspap	er: Times Higher Education	
Internet users access to ranking:	open access		
Main target groups:	higher education institution	าร	
	policymakers, government	ts and funding agencies	
	students and parents		
Level of comparison:	broad fields: 11		
	fields or subject: 34		
	institutional: 980		
Major dimensions covered:	internationalization		
	knowledge transfer		
	reputation		
	research		
	teaching		
Structure of presentation:	standard presentation (league tables)		
Data sources:	data collected from HEIs b		
	survey conducted exclusive	ely by ranking organization	
	third-party database: Scopus		
Quality assurance of ranking:	certification		
Website of the methodology:	www.timeshighereducation.com/		
	world-university-rankings/	methodology-world-university-rankings-2	018

Name of the ranking organization:	Times Higher Education
Address:	TES Global Limited, 26 Red Lion Square, London WC1R 4HQ
Website of the ranking organization:	www.timeshighereducation.com/
Type of organization:	commercial/for-profit



THE World University Rankings

Methodology

THE World University Rankings judges research-intensive universities across all of their core missions: teaching, research, knowledge transfer and international outlook. THE World University Ranking uses 13 performance indicators grouped into five areas.

TEACHING (the learning environment) 30%

Reputation survey (15%) - The most recent Academic Reputation Survey (run annually) that underpins this category was carried out in January to March 2017, attracting 10,568 responses. The 2017 data are combined with the results of the 2016 survey, giving more than 20,000 responses.

Staff-to-student ratio (4.5%)

Doctorate-to-bachelor's ratio (2.25%)

Doctorates-awarded-to-academic-staff ratio (6%)

Institutional income (2.25%) - Institutional income is scaled against academic staff numbers and normalised for purchasing-power parity (PPP).

RESEARCH (volume, income and reputation) 30%

Reputation survey (18%) - Indicator is based on the responses to annual Academic Reputation Survey.

Research income (6%) - Research income is scaled against academic staff numbers.

Research productivity (6%) - To measure productivity THE counts the number of papers published in the academic journals indexed by Elsevier's Scopus database per scholar, scaled for institutional size and normalised for subject.

CITATIONS (research influence) 30%

THE examine research influence by capturing the number of times a university's published work is cited by scholars globally. In 2017 THE bibliometric data supplier Elsevier examined more than 56 million citations to 11.9 million journal articles, conference proceedings and books and book chapters published over five years. The data include the 23,000 academic journals indexed by Elsevier's Scopus database and all indexed publications between 2011 and 2015. Citations to these publications made in the six years from 2011 to 2016 are also collected.

INTERNATIONAL OUTLOOK (staff, students, research) 7.5%

International-to-domestic-student ratio (2.5%)

International-to-domestic-staff ratio (2.5%)

International collaboration (2.5%) - The proportion of a university's total research journal publications that have at least one international co-author and reward higher volumes.

INDUSTRY INCOME (knowledge transfer) 2.5%

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.

Note: The calculation of the rankings for 2018 has been subject to independent audit by professional services firm PricewaterhouseCoopers (PwC).

U-Multirank

■ Information on ranking

Name of the ranking:	U-Multirank		
Geographical scope:	global		
Status of the ranking:	autonomous/independent ranking		
Name of person in charge of ranking:	Gero Federkeil		
E-mail of person in charge of ranking:	gero.federkeil@che.de		
Website of the ranking:	www.umultirank.org		
Publication frequency:	annual		
First year of publication:	2005	Most recent year of publication: 2017	
Type of publication:	internet		
	mobile application		
Internet users access to ranking:	open access		
Main target groups:	employers		
	higher education instituti	ons	
	policymakers, governme	nts and funding agencies	
	students and parents		
Level of comparison:	fields or subject: 16		
	institutional: 1500		
	study programs: 9700		
Major dimensions covered:	internationalization	research	
	knowledge transfer	teaching	
	regional engagement		
Structure of presentation:	multi-indicator ranking		
Data sources:	data collected from HEIs	by ranking organization:	
	Statistical and manual ch	necks of consistency and plausibility;	
	checks against other data sources		
	survey of HEIs staff or students by ranking organization in collaboration with a HEI		
	third-party database: The	omson Reuters, PATSTAT	
Quality assurance of ranking:	advisory board		
Website of the methodology:	www.umultirank.org/#!/about/Methodology		

Name of the ranking organization:	Consortium of organisations: Centre for Higher Education (CHE)
	Center for Higher Education Policy Studies (CHEPS)
	Centre for Science and Technology Studies (CWTS)
Address:	CHE: Verler Strasse 6, 33331 Guetersloh, Germany
Website of the ranking organization:	www.che.de; https://www.utwente.nl/bms/cheps/; www.cwts.nl/
Type of organization:	other: private (non-profit) - CHE; university - CHEPS; CWTS



U-Multirank

■ Methodology

U-Multirank makes use of three different types of indicators: Ranking indicators (institutional-level and field-based), Mapping indicators and Descriptives.

Institutional and Subject Ranking Indicators

U-Multirank provides a multi-dimensional ranking both on the institutional and the field level. The dimensions are teaching and learning, research, knowledge transfer, international orientation and regional engagement. The performance of a university on each dimension is represented by a number of indicators and each indicator score is translated into the university's position in five performance groups ("very good" through "weak"). The choice of indicators is heavily based on the earlier U-Multirank feasibility study and adapted to include suggestions made by various stakeholders and U-Multirank's Advisory Board.

Sunburst Chart

On an institution's profile page, an easy-to-view sunburst chart is available for users to see the performance scores of the respective institution. The sunburst is downloadable and can be used to give an at-a-glance picture of an institution's performance on the institutional level.

Mapping Indicators

One principle of U-Multirank is to compare "like with like". In rankings universities should only be compared when their purposes and activity profiles are sufficiently similar. In our view, this principle implies a two-step-process. First, universities with broadly similar profiles have to be identified by the user, based on indicators expressing particular characteristics of the university and its activities. This "like-with-like" selection is based on "mapping Indicators", for instance expressing the size, scope, age or features of a university's activity profile. Second, a ranking of "like with like" institutions is made by the user with the option of narrowing down the selection of institutions to particular countries.

Descriptives

In U-Multirank, the performance of universities is shown by means of ranking (or performance) indicators. Some other features of universities are presented by means of mapping indicators – showing particular aspects of a university's scope, the degree levels at which the institution awards degrees, or its orientation towards the regional, respectively international environment. Next to this, U-Multirank also shows some additional characteristics of the university, such as its location, the number of academic publications it has produced (per full-time equivalent academic staff) according to its own (i.e. self-reported) counts, and the rate of unemployment of its graduates (at Bachelor and/or Master level; 18 months after graduation) relative to the national graduate unemployment rate.

UI GreenMetric Ranking of World Universities

■ Information on ranking

Name of the ranking:	III GroopMotric Panking	of World Universities	
	UI GreenMetric Ranking of World Universities		
Geographical scope:	global		
Status of the ranking:	autonomous / independent ranking		
Name of person in charge of ranking:	Riri Fitri Sari		
E-mail of person in charge of ranking:	riri@ui.ac.id		
Website of the ranking:	http://greenmetric.ui.ac.id/	overall-ranking-2017	
Publication frequency:	annual		
First year of publication:	2010	Most recent year of publication: 2017	
Type of publication:	internet		
	print - magazine, newspap	per	
Internet users access to ranking:	open access		
Main target groups:	employers		
	higher education institutio	ns	
	policymakers, governmen	ts and funding agencies	
	quality assurance, accreditation, and recognition organizations		
	students and parents		
Level of comparison:	institutional: 516		
	other: Green and Sustaina	able campus	
Major dimensions covered:	employability	innovation	
,	research	sustainability	
	teaching	web presence	
Structure of presentation:	standard presentation (lea	·	
Data sources:	data collected from HEIs by ranking organization		
	Internet search		
Quality assurance of ranking:	advisory board		
Website of the methodology:	http://greenmetric.ui.ac.id/criterian-indicator		
		3	

Name of the ranking organization:	University of Indonesia
Address:	Rektorat I lantai 2. Kampus Baru UI. Depok 16424. Indonesia
Website of the ranking organization:	http://greenmetric.ac.is
Type of organization:	university/higher education institution



UI GreenMetric Ranking of World Universities

Methodology

The **UI GreenMetric World University Ranking** is an initiative of Universitas Indonesia. The aim of this ranking is to provide the result of online survey regarding the current condition and policies related to Green Campus and Sustainability in the Universities all over the world. It is expected that by drawing the attention of university leaders and stake holders, more attention will be given to combating global climate change, energy and water conservation, waste recycling, and green transportation. Ranking consists of six criteria taking into account a total of 38 indicators.

SETTING AND INFRASTRUCTURE (15%)

The campus setting and infrastructure information will give the basic information of the university policy towards green environment. This criterion also shows whether the campus deserves to be called Green Campus. The aim is to trigger the participating university to provide more space for greenery and in safeguarding environment, as well as developing sustainable energy.

ENERGY AND CLIMATE (21%)

The university's attention to the use of energy and climate change issues takes the highest weighting in this ranking. With this criterion universities are expected to increase the effort in energy efficiency on their buildings and to take more about nature and energy resources.

WASTE (18%)

Waste treatment and recycling activities are major factors in creating a sustainable environment. The activities of university staff and students in campus will produce a lot of waste, therefore some programs and waste treatments should be among the concern of the university, i.e. recycling program, toxic waste recycling, organic waste treatment, inorganic waste treatment, sewerage disposal, policy to reduce the use of paper and plastic in campus.

WATER (10%)

Water use in campus is another important indicator in Greenmetric. The aim is that universities can decrease water usage, increase conservation program, and protect the habitat. Water conservation program, piped water use are among the criteria.

TRANSPORTATION (18%)

Transportation system plays an important role on the carbon emission and pollutant level in university. Transportation policy to limit the number of motor vehicles in campus, the use of campus bus and bicycle will encourage a healthier environment. The pedestrian policy will encourage students and staff to walk around campus, and avoid using private vehicle. The use of environmentally friendly public transportation will decrease carbon footprint around campus.

EDUCATION (18%)

This criterion is based on the thought that university has an important role in creating the new generation concern with sustainability issues.

uniRank University Ranking™

■ Information on ranking

Name of the ranking:	uniRank University Ranking™		
Geographical scope:	global		
Status of the ranking:	autonomous / independent ranking		
Name of person in charge of ranking:	Fabio Fatuzzo		
E-mail of person in charge of ranking:	information@4icu.org		
Website of the ranking:	www.4icu.org/top-universities-world/		
Publication frequency:	semiannual		
First year of publication:	2005 Most recent year of publication: 2017		
Type of publication:	internet		
Internet users access to ranking:	open access		
Main target groups:	students and parents		
Level of comparison:	institutional: 13146		
	also Facebook University Rankings (number of fans/likes)		
	and Twitter University Rankinhgs (number of followers)		
Major dimensions covered:	web presence		
Structure of presentation:	standard presentation (league tables)		
Data sources:	An algorithm including 5 unbiased and independent web metrics		
	extracted from 4 different web intelligence sources: Moz Domain Authority,		
	Alexa Global Rank, SimilarWeb Global Rank, Majestic Referring Domains,		
	Majestic Trust Flow.		
Quality assurance of ranking:	advisory board		
Website of the methodology:	www.4icu.org/about		

Name of the ranking organization:	uniRank™
Address:	Ste 2C, 5 Tambua Street, Sydney New South Wales 2009, Australia
Website of the ranking organization:	www.4icu.org/contact/
Type of organization:	private, non-profit



uniRank University Ranking™

■ Methodology

The uniRank University Ranking™ (formerly 4 International Colleges & Universities or 4icu.org) is an international higher education directory reviewing accredited universities and colleges in the world. uniRank™ includes 13,000 Colleges and Universities, ranked by web popularity, in 200 countries.

The aim of the **uniRank University Ranking™** is to provide an approximate popularity ranking of world Universities and Colleges based upon the popularity of their websites in terms of traffic, trust and quality link popularity. This is especially intended to help international students and academic staff to understand how popular a specific University or College is in a foreign country.

The uniRankg[™] is based upon an algorithm including 5 unbiased and independent web metrics extracted from 4 different web intelligence sources:

Moz Domain Authority Alexa Global Rank SimilarWeb Global Rank Majestic Referring Domains Majestic Trust Flow

Ranking process. Web metrics data are collected on the same week to minimize temporal fluctuations and maximize comparibility. A pre-computational filter is adopted to detect outliers in the raw data. Further investigation and a review of both the Alexa Global Rank and SimilarWeb Global Rank data is carried out for universities adopting a subdomain (highly not recommended) as their official institutional home page.

Once outliers are detected and subdomains data reviewed and adjusted, web metrics data are normalised to a scale of 0 to 100 taking into consideration the logarithmic nature in which the Moz Domain Authority, the Alexa Global Rank and the SimilarWeb Global Rank are expressed. The normalised values are aggregated based on a weighted average algorithm which generates the final score and web ranking. The uniRank University RankingTM is updated every six months, in January and July.

Ranking algorithm disclosure. The exact formula adopted to aggregate the 5 web metrics is not disclosed for copyright reasons and to minimise attempts of manipulation from University webmasters in order to achieve a better rank. The same philosophy is adopted by Google with regards to their search engine ranking algorithm.

URAP University Ranking by Academic Performance

■ Information on ranking

Name of the ranking:	URAP University Ranking by Academic Performance		
Geographical scope:	global		
Status of the ranking:	autonomous/indepen	dent ranking	
Name of person in charge of ranking:	Ural Akbulut		
E-mail of person in charge of ranking:	info@urapcenter.org		
Website of the ranking:	www.urapcenter.org/2	017/world.php?q=MS0yNTAw	
Publication frequency:	annual		
First year of publication:	2010	Most recent year of publication: 2017	
Type of publication:	internet		
Internet users access to ranking:	open access		
Main target groups:	higher education institutions		
	students and parents		
Level of comparison:	fields or subject: 41		
	institutional: 2500		
Major dimensions covered:	internationalization		
	research		
Structure of presentation:	standard presentation (league tables)		
Data sources:	third-party database: Clarivate Analytics InCites		
Quality assurance of ranking:	advisory board		
Website of the methodology:	www.urapcenter.org/2017/methodology.php?q=3		

■ Information on ranking organization

Name of the ranking organization:	University Ranking by Academic Performance
Address:	Informatics Institute, Middle East Technical University, Universiteler Mah.
	Dumlupinar Blvd. Cankaya ,06800 Ankara, Turkey
Website of the ranking organization:	www.urapcenter.org
Type of organization:	other: non-profit research lab established in a university

University Ranking by Academic Performance

URAP University Ranking by Academic Performance

Methodology

The **URAP University Ranking by Academic Performance** is based on 6 academic performance indicators, namely articles published in the last year, citations accrued in the past 5 years, total documents published in the past 5 years, articles published with international co-authors, article impact total and citation impact total. Since URAP Ranking is an academic performance based ranking, publications constitute the basis of the ranking methodology. URAP Ranking gathers bibliometric data about 3,500 Higher Education Institutes (HEI) through Clarivate Incites. A detailed description of each indicator is provided below:

Article (21%) - is a measure of current scientific productivity which includes articles published in 2016 and indexed by Web of Science and listed by InCites. Article number covers articles, reviews and notes.

Citation (21%) - is a measure of research impact and scored according to the total number of citations received in 2012-2016 for the articles published in 2012-2016 and indexed by Web of Science.

Total Document (10%) - 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 2012-2016 period.

Article Impact Total AIT (18%) - is a measure of scientific productivity corrected by the institution's normalized CPP(1) with respect to the world CPP in 41 subject areas between 2012 and 2016. 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 41 fields. This indicator aims to balance the institution's scientific productivity with the field normalized impact generated by those publications in each field.

Citation Impact Total CIT (15%) - is a measure of research impact corrected by the institution's normalized CPP with respect to the world CPP in 41 subject areas between 2012 and 2016. 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 41 fields. This indicator aims to balance the institution's scientific impact with the field normalized impact generated by the publications in each field.

International Collaboration (15%) - 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 2012-2016.

Note: The 41 subject areas used in the URAP Ranking are based on the discipline classification matrix developed by the Australian Research Council for journals indexed in Web of Science.

US News Best Global Universities Rankings

■ Information on ranking

Name of the ranking:	US News Best Global Universities Rankings			
Geographical scope:	global			
Status of the ranking:	autonomous/indepen	autonomous / independent ranking		
Name of person in charge of ranking:	Robert Morse			
E-mail of person in charge of ranking:	rmorse@usnews.com			
Website of the ranking:	www.usnews.com/edi	ucation/best-global-universities/rankings		
Publication frequency:	annual			
First year of publication:	2014	Most recent year of publication: 2017		
Type of publication:	internet			
	mobile application			
Internet users access to ranking:	open access			
Main target groups:	higher education institutions			
	policymakers, governments and funding agencies			
	quality assurance, accreditation, and recognition organizations			
	students and parents			
Level of comparison:	fields or subject: 22			
	institutional: 1250			
Major dimensions covered:	reputation			
	research			
Structure of presentation:	standard presentation	(league tables)		
Data sources:	third-party database:	Clarivate Analytics InCites;		
	Clarivate Analytics' W	eb of Science		
Quality assurance of ranking:	periodic consultancy			
Website of the methodology:	www.usnews.com/education/			
	best-global-universitie	es/articles/methodology		

Name of the ranking organization:	U.S. News & World Report LP
Address:	Washington DC, USA
Website of the ranking organization:	www.usnews.com
Type of organization:	commercial/for-profit



US News Best Global Universities Rankings

Methodology

The **US News Best Global Universities Rankings** is based on 12 indicators grouped in four areas. The bibliometric indicators used in the US Ranking are based on data from Clarivate Analytics' Web of ScienceTM for the five-year period from 2011 to 2015.

REPUTATIONAL INDICATORS

Global research reputation (12.5%) - This indicator reflects the aggregation of the most recent five years of results of the Clarivate Analytics' Academic Reputation Survey for the best universities globally for research.

Regional research reputation (12.5%) - This indicator reflects the aggregation of the most recent five years of results of the Clarivate Analytics' Academic Reputation Survey for the best universities for research in the region.

BIBLIOMETRIC INDICATORS

Publications (10%) - This is a measure of the overall research productivity of a university, based on the total number of scholarly papers - reviews, articles and notes.

Books (2.5%) - The use of this ranking indicator provides a useful supplement to the data on articles and better represents universities that have a focus on social sciences and arts and humanities.

Conferences (2.5%) - Academic conferences are an important venue for scholarly communication, particularly in disciplines tied to engineering and computer science.

Normalized citation impact (10%) - The total number of citations per paper represents the overall impact of the research of the university and is independent of the size or age of the university; the value is normalized.

Total citations (7.5%) - Total citations have been normalized to overcome differences in research area, publication year of the paper and publication type.

Number of publications that are among the 10 percent most cited (12.5%) - This indicator reflects the number of papers that have been assigned as being in the top 10 percent of the most highly cited papers in the world for their respective fields.

Percentage of total publications that are among the 10 percent most cited (10%) - It is a measure of the amount of excellent research the university produces and is independent of the university's size.

International collaboration (5%) - The proportion of the institution's total papers that contain international co-authors divided by the proportion of internationally co-authored papers for the country that the university is in.

Percentage of total publications with international collaboration (5%) - The proportion of the institution's total papers that contain international co-authors.

SCIENTIFIC EXCELLENCE INDICATORS

Number of highly cited papers that are among the top 1 percent most cited in their respective field (5%)

- This indicator shows the volume of papers that are classified as highly cited in the Clarivate Analytics' service known as Essential Science Indicators.

Percentage of total publications that are among the top 1 percent most highly cited papers (5%) - This percent of highly cited papers shows the number of highly cited papers for a university divided by the total number of documents it produces.

IREG Inventory of International University Rankings

GLOBAL UNIVERSITY SUB-RANKINGS

QS Graduate Employability Rankings QS Top 50 Under 50 THE World Reputation Rankings THE Young University Ranking

QS Graduate Employability Rankings

■ Information on ranking

NI CHI III	000 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Name of the ranking:	QS Graduate Employability Rankings		
Geographical scope:	global		
Status of the ranking:	autonomus/independent ranking		
Name of person in charge of ranking:	Ben Sowter		
E-mail of person in charge of ranking:	ben@qs.com		
Website of the ranking:	www.topuniversities.com/university-rankings/employability-rankings/2017		
Publication frequency:	annual		
First year of publication:	2015 Most recent year of publication: 2017		
Type of publication:	internet		
	print - special publication: QS Report		
Internet users access to ranking:	open access		
Main target groups:	employers		
	higher education institutions		
	students and parents		
Level of comparison:	institutional: 500		
Major dimensions covered:	employability		
Structure of presentation:	standard presentation (league tables)		
Data sources:	survey conducted exclusively by ranking organization		
	third-party database: Elseviers' Scopus		
	other: data analysis		
Quality assurance of ranking:	advisory board		
Website of the methodology:	www.topuniversities.com/employability-rankings/methodology		

Name of the ranking organization:	Quacquarelli Symonds Ltd (QS)
Address:	London Main Office, 1 Tranley Mews, Fleet Road London, NW3 2DG
Website of the ranking organization:	https://www.topuniversities.com/about-qs
Type of organization:	commercial/for-profit



QS Graduate Employability Rankings

■ Methodology

The **QS Graduate Employability Rankings** is an annual ranking of universities around the world, celebrating institutions which are committed to and effective in preparing students for the workplace. Each institution's total score is compiled based on the following five indicators.

Employer reputation (30%)

Employer reputation is measured using a global survey, in which graduate employers are asked to identify the institutions producing the best graduates in their field. For the 2018 edition of the ranking, the opinions of over 30,000 employers were considered. International and domestic responses each contribute 50% to an institution's final score.

Alumni outcomes (25%)

To assess alumni outcomes, QS has sourced the alma maters of those included in over 100 lists of highly successful individuals, each measuring desirable outcomes in a particular walk of life. In total, QS analyzed the educational pathways more than 30,000 of the world's most innovative, creative, wealthy, entrepreneurial, and/or philanthropic individuals, to establish which universities are producing world-changing graduates. A higher weighting is applied to those individuals featured in lists focused on younger profiles, to ensure a high level of contemporary relevance.

Partnerships with Employers per Faculty (25%)

This indicator comprises two parts. First, it uses Elsevier's Scopus database to establish which universities are collaborating successfully with global companies to produce citable, transformative research. Only distinct companies producing three or more collaborative papers in a five-year period (2011-2015) are included in the count. The 2018 edition of ranking accounts for university collaborations with 2,000 top global companies, as listed by Fortune and Forbes. Second, it considers work placement-related partnerships that are reported by institutions and validated by the QS research team. Both figures are adjusted to account for the number of faculty at each university, and then combined into a composite index.

Employer/Student Connections (10%)

This indicator involves summing the number of employers who are actively present on a university's campus, providing motivated students with an opportunity to network and acquire information. Employer presence also increases the opportunity of students achieving career-launching internships and research opportunities. This "active presence" may take the form of participating in careers fairs, organizing company presentations, or any other self-promoting activities.

Graduate employment rate (10%)

This indicator is essential for any understanding of how successful universities are at nurturing employability. It involves measuring the proportion of graduates (excluding those opting to pursue further study or unavailable to work) in full- or part-time employment within 12 months of graduation. The scores in this category are calculated by considering the difference between each institution's employment rate and the national average. This accounts for the fact that a university's ability to foster employability will be affected by the economic performance of the country in which it is situated.

QS Top 50 Under 50

■ Information on ranking

No. of the state o	007 5011 1 5	•		
Name of the ranking:	QS Top 50 Under 50			
Geographical scope:	global			
Status of the ranking:	ranking related to QS World University Ranking			
Name of person in charge of ranking:	Ben Sowter			
E-mail of person in charge of ranking:	ben@qs.com			
Website of the ranking:	www.topuniversities	.com/university-rankings/top-50-unde	r-50/2018	
Publication frequency:	annual			
First year of publication:	2012	Most recent year of pub	lication: 2017	
Type of publication:	internet			
	print - special public	ation: QS Top 50 under 50		
Internet users access to ranking:	open access			
Main target groups:	higher education institutions policymakers, governments and funding agencies			
	students and parents			
Level of comparison:	institutional: 150			
Major dimensions covered:	employability	internationalization		
	reputation	research	teaching	
Structure of presentation:	standard presentation (league tables)			
Data sources:	survey conducted exclusively by ranking organization			
	third-party database (data not provided by HEI): Scopus			
Quality assurance of ranking:	advisory board			
	certification (e.g. IREG Audit)			
	periodic consultancy	/		
Website of the methodology:	https://www.topuniv	ersities.com/top-50-under-50/methodo	ology	
		•		

Name of the ranking organization:	Quacquarelli Symonds Ltd (QS)
Address:	London Main Office, 1 Tranley Mews, Fleet Road London, NW3 2DG
Website of the ranking organization:	https://www.topuniversities.com/about-qs
Type of organization:	commercial/for-profit



QS Top 50 Under 50

■ Methodology

The **QS Top 50 Under 50 University Rankings 2018** is based on the latest edition of the QS World University Rankings. Ranking assesses universities' performance across six indicators: academic reputation, employer reputation, research citations per faculty member, faculty/student ratio, proportion of international students, and proportion of international faculty members.

Academic reputation (40%)

Academic reputation is measured using a global survey (QS Academic Survey), in which academics are asked to identify the institutions where they believe the best work is currently taking place within their own field of expertise. The aim is to give prospective students a sense of the consensus of opinion within the international academic community. For the 2018 edition, a total of over 70,000 academics contributed. Regional weightings are applied to counter any discrepancies in response rates.

Employer reputation (10%)

The employer reputation indicator is also based on a global survey (QS Employer Survey), this time asking employers to identify the universities they perceive to be producing the best graduates. This indicator is unique among international university rankings. Its purpose is to give students a better sense of how universities are viewed in the graduate jobs market. The 2018 edition draws on responses from over 30,000 graduate employers. International and domestic responses will contribute 50% each to an institution's final score.

Student/Faculty Ratio (20%)

This is a simple measure of the number of academic staff employed relative to the number of students enrolled. In the absence of an international standard by which to measure teaching quality, this indicator aims to identify the universities that are best equipped to provide small class sizes and a good level of individual supervision.

Citations per faculty (20%)

This indicator aims to assess universities' research impact. A "citation" means a piece of research being cited (referred to) within another piece of research. Generally, the more often a piece of research is cited, the more influential it is. So the more highly cited research papers a university publishes, the stronger its research output is considered. QS collects this information using Scopus, the world's largest database of research abstracts and citations. The latest five complete years of data are used, and the total citation count is assessed in relation to the number of academic faculty members at the university, so that larger institutions do not have an unfair advantage. For the 2018 rankings, QS assessed 99 million citations from 10.3 million papers once self-citations were excluded.

International faculty ratio (5%) & international student ratio (5%)

The last two indicators aim to assess how successful a university has been in attracting students and academics from other nations. This is based on the proportion of international students and faculty members at the institution. Each of these indicators contributes 5% to the overall ranking results.

THE World Reputation Rankings

■ Information on ranking

Name of the ranking:	THE World Reputation Rankings			
Geographical scope:	global			
Status of the ranking:	related to THE World	related to THE World University Rankings		
Name of person in charge of ranking:	Phil Baty	Phil Baty		
E-mail of person in charge of ranking:	phil.baty@tesglobal.d	com		
Website of the ranking:	www.timeshighereduc	ation.com/world-university-rankings/2016/reputation-ranking		
Publication frequency:	annual			
First year of publication:	2011	Most recent year of publication: 2017		
Type of publication:	internet			
	print - magazine, newspaper: Times Higher Education			
Internet users access to ranking:	open access			
Main target groups:	higher education institutions			
	policymakers, governments and funding agencies			
	students and parents	3		
Level of comparison:	institutional: 100			
Major dimensions covered:	reputation			
Structure of presentation:	standard presentation (league tables)			
Data sources:	survey conducted exclusively by ranking organization			
Quality assurance of ranking:	certification			
Website of the methodology:	www.timeshighereducation.com/world-university-rankings/			
	world-reputation-rank	kings-2016-methodology		

Name of the ranking organization:	Times Higher Education
Address:	TES Global Limited, 26 Red Lion Square, London WC1R 4HQ
Website of the ranking organization:	www.timeshighereducation.com/
Type of organization:	commercial/for-profit



THE World Reputation Rankings

■ Methodology

The **Times Higher Education World Reputation Rankings** are created using the world's largest invitation-only academic opinion survey – a unique piece of research. The Academic Reputation Survey, available in 15 languages, uses United Nations data as a guide to ensure that the response coverage is as representative of world scholarship as possible. It is also evenly spread across academic disciplines.

The questionnaire, which is administered on behalf of THE by Elsevier, targets only experienced, published scholars, who offer their views on excellence in research and teaching within their disciplines and at institutions with which they are familiar. The 2017 rankings are based on a survey carried out between January 2017 and March 2017, which received a total of 10,566 responses from 137 countries.

The best represented subject was physical sciences (accounting for 14.6 per cent of responses), followed closely by clinical and health (14.5 per cent). Also well represented were life sciences (13.3 per cent of responses), business and economics (13.1 per cent), engineering (12.7 per cent) and arts and humanities (12.5 per cent). The rest of the responses came from social sciences (8.9 per cent), computer science (4.2 per cent), education (2.6 per cent), psychology (2.6 per cent) and law (0.9 per cent).

A total of 22 per cent of responses hail from North America. The rest of the responses break down as follows: 33 per cent from the Asia Pacific region, 25 per cent from Western Europe, 11 per cent from Eastern Europe, 5 per cent from Latin America, 3 per cent from the Middle East and 2 per cent from Africa.

In the survey, scholars are questioned at the level of their specific subject discipline. They are not asked to create a ranking themselves or to list a large range of institutions, but to name no more than 15 universities that they believe are the best in each category (research and teaching), based on their own experience.

The reputation table ranks institutions according to an overall measure of their esteem that combines data on their reputation for research and teaching. The two scores are combined at a ratio of 2:1, giving more weight to research because our expert advisers have suggested that there is greater confidence in respondents' ability to make accurate judgements about research quality.

The scores are based on the number of times that an institution is cited by respondents as being the best in their field. The number one institution, Harvard University, was the one selected most often. The scores for all other institutions in the table are expressed as a percentage of Harvard's, which is set at 100. For example, the University of Oxford received 69.1 per cent of the number of nominations that Harvard gained, giving it a score of 69.1 against Harvard's 100. This scoring system, which differs from that used in the THE World University Rankings, is intended to give a clearer and more meaningful perspective on the reputation data in isolation.

THE Young University Ranking

■ Information on ranking

_			
Name of the ranking:	THE Young University Ranking		
Geographical scope:	global		
Status of the ranking:	related to THE World University Rankings		
Name of person in charge of ranking:	Phil Baty		
E-mail of person in charge of ranking:	phil.baty@tesglobal.co	m	
Website of the ranking:	www.timeshighereducati	on.com/world-university-rankings/2017/	
	young-university-ranking	S	
Publication frequency:	annual		
First year of publication:	2004	Most recent year of publication:	2017
Type of publication:	internet		
	print - magazine, news	paper: Times Higher Education	
Internet users access to ranking:	open access		
Main target groups:	higher education institutions		
	policymakers, governments and funding agencies		
	students and parents		
Level of comparison:	institutional: 200		
Major dimensions covered: internationalization			
	knowledge transfer		
	reputation		
	research		
	teaching		
Structure of presentation:	standard presentation	(league tables)	
Data sources:	data collected from HE	ls by ranking organization	
	•	usively by ranking organization	
	third-party database: E	Iseviers' Scopus	
Quality assurance of ranking:	certification		
Website of the methodology:	_	tion.com/world-university-rankings/	
	young-university-rankir	gs-2017-methodology	

Name of the ranking organization:	Times Higher Education
Address:	TES Global Limited, 26 Red Lion Square, London WC1R 4HQ
Website of the ranking organization:	www.timeshighereducation.com/
Type of organization:	commercial/for-profit



THE Young University Ranking

Methodology

The **Times Higher Education Young Universities Ranking** uses the same 13 performance indicators (grouped into five areas) as the flagship THE World University Rankings but the methodology has been recalibrated to give less weight to reputation.

TEACHING (the learning environment) 30%

Reputation survey (10%) - The most recent Academic Reputation Survey (run annually) that underpins this category was carried out in January to March 2017, attracting 10,568 responses. The 2017 data are combined with the results of the 2016 survey, giving more than 20,000 responses.

Staff-to-student ratio (6%)

Doctorate-to-bachelor's ratio (3%)

Doctorates-awarded-to-academic-staff ratio (8%)

Institutional income (3%) - Institutional income is scaled against academic staff numbers and normalised for purchasing-power parity (PPP).

RESEARCH (volume, income and reputation) 30%

Reputation survey (12%) - Indicator is based on the responses to annual Academic Reputation Survey.

Research income (9%) - Research income is scaled against academic staff numbers and adjusted for purchasing-power parity (PPP).

Research productivity (9%) - To measure productivity THE counts the number of papers published in the academic journals indexed by Elsevier's Scopus database per scholar, scaled for institutional size and normalised for subject.

CITATIONS (research influence) 30%

THE examine research influence by capturing the number of times a university's published work is cited by scholars globally. In 2017 THE bibliometric data supplier Elsevier examined more than 56 million citations to 11.9 million journal articles, conference proceedings and books and book chapters published over five years. The data include the 23,000 academic journals indexed by Elsevier's Scopus database and all indexed publications between 2011 and 2015.

INTERNATIONAL OUTLOOK (staff, students, research) 7.5%

International-to-domestic-student ratio (2.5%)

International-to-domestic-staff ratio (2.5%)

International collaboration (2.5%) - The proportion of a university's total research journal 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%

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.

IREG Inventory of International University Rankings

GLOBAL RANKINGS BY SUBJECT

QS World University Rankings by Subject ShanghaiRanking's Global Ranking of Academic Subjects ShanghaiRanking's Global Ranking of Sport Science Schools and Departments THE World University Rankings by Subject US News Best Global Universities Subject Rankings

QS World University Rankings by Subject

■ Information on ranking

Name of the ranking:	QS World University Rankings by Subject		
Geographical scope	global		
Status of the ranking:	related to QS World University Rankings		
Name of person in charge of ranking:	Ben Sowter		
E-mail of person in charge of ranking:	ben@qs.com		
Website of the ranking:	www.topuniversities.com/subject-rankings/2017		
Publication frequency:	annual		
First year of publication:	2011	Most recent year of publication: 2017	
Type of publication:	internet		
	print - special publicat	ion: QS reports	
Internet users access to ranking:	open access		
Main target groups:	employers		
	higher education instit	utions	
	policymakers, governments and funding agencies students and parents		
Level of comparison:	fields or subject: 46		
Major dimensions covered:	employability		
	reputation		
	research		
	teaching		
Structure of presentation:	standard presentation (league tables)		
Data sources:	data collected from HEIs by ranking organization		
	survey conducted exc	lusively by ranking organization	
	third-party database: I	Elseviers' Scopus	
Quality assurance of ranking:	advisory board		
	certification		
Website of the methodology:	www.topuniversities.co	m/subject-rankings/methodology	

Name of the ranking organization:	Quacquarelli Symonds Ltd (QS)
Address:	London Main Office, 1 Tranley Mews, Fleet Road London, NW3 2DG
Website of the ranking organization:	www.topuniversities.com/about-qs
Type of organization:	commercial/for-profit



QS World University Rankings by Subject

Methodology

The **QS World University Rankings by Subject** ranks the world's top universities in individual subject areas, covering 46 subjects as of 2017. Each of the subject rankings is compiled using four sources. The first two of these are QS's global surveys of academics and employers, which are used to assess institutions' international reputation in each subject. The second two indicators assess research impact, based on research citations per paper and h-index in the relevant subject.

ACADEMIC REPUTATION

QS's global survey of academics has been at the heart of the QS World University Rankings® since their inception in 2004. In 2017, the QS World University Rankings by Subject draws on responses from 74,651 academics worldwide. For each of the faculty areas they identify (up to five), respondents are asked to list up to 10 domestic and 30 international institutions which they consider to be excellent for research in the given area. They are not able to select their own institution.

EMPLOYER REPUTATION

The QS World University Rankings are unique in incorporating employability as a key factor in the evaluation of international universities. In 2017, the QS World University Rankings by Subject draws on 40,643 survey responses from graduate employers worldwide. Employers are asked to identify up to 10 domestic and 30 international institutions they consider excellent for the recruitment of graduates. They are also asked to identify the disciplines from which they prefer to recruit.

RESEARCH CITATIONS PER PAPER

QS World University Rankings by Subject measures citations per paper, rather than citations per faculty member. This is due to the impracticality of reliably gathering faculty numbers broken down by discipline for each institution. A minimum publication threshold is set for each subject to avoid potential anomalies stemming from small numbers of highly cited papers. Both the minimum publications threshold and the weighting applied to the citations indicator are adapted in order to best reflect prevalent publication and citation patterns in a given discipline. All citations data is sourced from the Scopus, spanning a five-year period.

H-INDEX

The h-index is a way of measuring both the productivity and impact of the published work of a scientist or scholar.

Weightings. As research cultures and publication rates vary significantly across academic disciplines, the QS World University Rankings by Subject applies a different weighting of the above indicators in each subject. For example, in medicine, where publication rates are very high, research citations and the h-index account for 25% of each university's total score. On the other hand, in areas with much lower publication rates such as history, these research-related indicators only account for 15% of the total ranking score. Meanwhile in subjects such as art and design, where there are too few papers published to be statistically significant, the ranking is based solely on the employer and academic surveys.

ShanghaiRanking's Global Ranking of Academic Subjects

■ Information on ranking

Name of the ranking:	ShanghaiRanking's Global Ranking of Academic Subjects		
Geographical scope:	global		
Status of the ranking:	autonomous / independent ranking		
Name of person in charge of ranking:	Ying Cheng		
E-mail of person in charge of ranking:	ycheng@shanghairanking.com		
Website of the ranking:	www.shanghairanking.com/Shanghairanking-Subject-Rankings/index.html		
Publication frequency:	annual		
First year of publication:	2009	Most recent year of publication: 2017	
Type of publication:	internet		
	print - special publicati	on: ARWU Report	
Internet users access to ranking:	open access		
Languages of publication:	English		
Main target groups:	higher education institutions		
	policymakers, governn	nents and funding agencies	
	students and parents		
Level of comparison:	fields or subject: 52		
Major dimensions covered:	education		
	faculty		
	research		
Structure of presentation:	standard presentation (league tables)		
Data sources:	third-party database: C	Clarivate Analytics InCites	
	other: Nobel Prize and	Fields Medal laureats	
Quality assurance of ranking:	advisory board		
	periodic consultancy		
Website of the methodology:	www.shanghairanking	.com/Shanghairanking-	
	Subject-Rankings/Met	hodology-for-ShanghaiRanking-Global-Ranking-	
	of-Academic-Subjects-	2017.html	

Name of the ranking organization:	ShanghaiRanking Consultancy
Address:	Room 1206, 955 Jianchuan Road, Minhang District, Shanghai, China
Website of the ranking organization:	www.shanghairanking.com/index.html
Type of organization:	commercial/for-profit



ShanghaiRanking's Global Ranking of Academic Subjects

■ Methodology

In **ShanghaiRanking's Global Ranking of Academic Subjects 2017**, institutions are ranked in 52 subjects across natural sciences, engineering, life sciences, medical sciences, and social sciences. Different weights are allocated to the indicators for different subjects.

PUB - The number of papers authored by an institution in an Academic Subject during the period of 2011-2015. Only papers of 'Article' type are considered. Data are collected from InCites database. Papers in different Web of Science categories are grouped into relevant Academic Subjects.

CNCI - Category Normalized Citation Impact (CNCI) is the ratio of citation of papers published by an institution in an Academic Subject during the period of 2011-2015 to the average citation of papers in the same category, of the same year and same type. A CNCI value of 1 represents world-average performance while a value above 1 represents performance above the world average. Only papers of 'Article' type are considered. Data are collected from InCites database.

IC - International collaboration (IC) is the number of publications that have been found with at least two different countries in addresses of the authors divided by the total number of publications in an Academic Subject for an institution during the period of 2011-2015. Only papers of 'Article' type are considered. Data are collected from InCites database.

TOP - The number of papers published in Top Journals in an Academic Subject for an institution during the period of 2011-2015. Top Journals are identified through ShanghaiRanking's Academic Excellence Survey or by Journal Impact Factor. In 2017, 94 top journals selected by the Survey are used in rankings of 33 Academic Subjects. For Academic Subjects that do not have journals identified by the Survey, the JCR top 20% journals are used. Top 20% journals are defined as their Journal Impact Factors in the top 20% of each Web of Science category according to Journal Citation Report (JCR) 2015, and then aggregated into different Academic Subjects. Only papers of 'Article' type are considered. In the Academic Subject of Public Health, although a top journal is selected by the Survey, there is no 'Article' type paper on it, therefore we use JCR top 20% journals instead.

AWARD - Refers to the total number of the staff of an institution winning a significant award in an Academic Subject. Staff is defined as those who work full-time at an institution at the time of winning the prize. If a researcher was retired at the time of winning the award, we count the institution where the researcher's last full-time academic position was at. The significant awards in each subject are identified through ShanghaiRanking's Academic Excellence Survey. If the award is awarded to more than one winner in one year, weights are set for winners according to their proportion of the prize. Different weights are set according to the periods of winning the prizes. The weight is 100% for winners in 2011-2015, 75% for winners in 2001-2010, 50% for winners in 1991-2000, and 25% for winners in 1981-1990.

ShanghaiRanking's Global Ranking of Sport Science Schools and Departments

■ Information on ranking

Name of the ranking:	ShanghaiRanking's Global Ranking of Sport Science Schools and Departments		
Geographical scope:	global		
Status of the ranking:	autonomous / independent ranking		
Name of person in charge of ranking:	Ying Cheng		
E-mail of person in charge of ranking:	ycheng@shanghairanking.com		
Website of the ranking:	http://shanghairanking.com/Special-Focus-Institution-Ranking/		
	Sport-Science-Schools-and-Departments-2017.html		
Publication frequency:	annual		
First year of publication:	2016 Most recent year of publication: 2017		
Type of publication:	internet		
Internet users access to ranking:	open access		
Main target groups:	higher education institutions		
	policymakers, governments and funding agencies		
	students and parents		
Level of comparison:	study programs: 300		
Major dimensions covered:	internationalization		
	reputation		
Structure of presentation:	standard presentation (league tables)		
Data sources:	third-party database (data not provided by HEI): Web of Science		
Quality assurance of ranking:	advisory board		
Website of the methodology:	http://shanghairanking.com/Special-Focus-Institution-Ranking/		
	Methodology-for-Sport-Science-Schools-and-Departments-2017.html		

Name of the ranking organization:	ShanghaiRanking Consultancy
Address:	Room 1206, 955 Jianchuan Road, Minhang District, Shanghai, China
Website of the ranking organization:	www.shanghairanking.com/index.html
Type of organization:	



ShanghaiRanking's Global Ranking of Sport Science Schools and Departments

Methodology

The ShanghaiRanking's Global Ranking of Sport Science Schools and Departments 2017 uses 5 performance indicators grouped into three criteria. Candidate universities have been selected based on two criteria. First, the candidate should either be a sport university or have sport-related units. Second, the institution should be actively engaging in research in the past five years. In total, 367 universities or about 400 sport-related units are selected and ranked.

RESEARCH OUTPUT

PUB - Papers indexed in Web of Science (20%)

PUB refers to the total number of papers indexed in Web of Science between 2012 and 2016. Both publications of 'Article' and 'Review' 'type are considered.

CIT - The number of citations to papers published by an institution (20%)

CIT refers to the total number of citations received between 2012 and 2016 to papers published by an institution between 2012 and 2016.

RESEARCH QUALITY

CPP - Citations per paper (25%)

CPP is citations per paper and measures the average number of times a paper is cited for.

TOP - Papers published in top 25% journals (25%)

TOP is the number of papers published in top 25% journals between 2012 and 2016. The top 25% journals are those with an impact factor in the top 25% according to Journal Citation Report, 2015.

INTERNATIONAL COLLABORATION

IC - Percentage of an institution's publications with international co-authorship (10%)

IC refers to the percentage of internationally collaborated papers to all papers.

THE World University Rankings by Subject

■ Information on ranking

Name of the ranking:	THE World University Rankings by Subject		
Geographical scope:	global		
Status of the ranking:	related to THE World University Rankings		
Name of person in charge of ranking:	Phil Baty		
E-mail of person in charge of ranking:	phil.baty@tesglobal.com		
Website of the ranking:	www.timeshighereducation.com/world-university-rankings/by-subject		
Publication frequency:	annual		
First year of publication:	2007 Most recent year of publication: 2017		
Type of publication:	internet		
	print - magazine, newspaper: Times Higher Education		
Internet users access to ranking:	open access		
Main target groups:	higher education institutions		
	policymakers, governments and funding agencies		
	students and parents		
Level of comparison:	fields or subject: 34		
Major dimensions covered:	internationalization knowledge transfer		
	reputation research		
	teaching		
Structure of presentation:	standard presentation (league tables)		
Data sources:	data collected from HEIs by ranking organization		
	survey conducted exclusively by ranking organization		
	third-party database: Scopus		
Quality assurance of ranking:	certification		
Website of the methodology:	www.timeshighereducation.com/world-university-rankings/		

Name of the ranking organization:	Times Higher Education
Address:	TES Global Limited, 26 Red Lion Square, London WC1R 4HQ
Website of the ranking organization:	www.timeshighereducation.com/
Type of organization:	commercial/for-profit



THE World University Rankings by Subject

■ Methodology

THE World University Rankings by Subject employs the same range of 13 performance indicators used in the overall World University Rankings 2018, brought together with scores provided under five categories. However, the overall methodology is carefully recalibrated for each broad subject, with the weightings changed to suit the individual fields. The weightings for eight ranking are:

TEACHING

(the learning environment)

Weighting: 27,5 - 32,5 per cent

RESEARCH

(volume, income and reputation)

Weighting: 27,5 - 32,5 per cent

CITATIONS

(research influence)

Weighting: 25 - 35 per cent

INTERNATIONAL OUTLOOK

(staff, students and research)

Weighting: 5 per cent

INDUSTRY INCOME

(innovation)

Weighting: 2,5 - 5 per cent

THE World University Rankings by Subject 2018 judges 34 subject (grouped into 11 broad subject area).

The broad subjects are: Arts & Humanities, Business & Economics, Clinical, Pre-cilinical & Health, Computer Science, Education, Engineering & Technology, Law, Life Sciences, Physical Sciences, Psychology, Social Sciences.

US News Best Global Universities Subject Rankings

■ Information on ranking

AL CHARLE	HON B (OLI III : W OLI IB II		
Name of the ranking:	US News Best Global Universities Subject Rankings		
Geographical scope:	global		
Status of the ranking:	related to US News Best Global University Ranking		
Name of person in charge of ranking:	Robert Morse		
E-mail of person in charge of ranking:	rmorse@usnews.com		
Website of the ranking:	www.usnews.com/education/best-global-universities#subject-rankings		
Publication frequency:	annual		
First year of publication:	2015 Most recent year of publication: 2017		
Type of publication:	internet		
Internet users access to ranking:	open access		
Main target groups:	higher education institutions		
	students and parents		
Level of comparison:	fields or subject: 22		
Major dimensions covered:	reputation		
	research		
Structure of presentation:	standard presentation (league tables)		
Data sources:	third-party database (data not provided by HEI): Clarivates Analytics InCites		
Quality assurance of ranking:	periodic consultancy		
Website of the methodology:	www.usnews.com/education/best-global-universities/articles/		
	subject-rankings-methodology		

Name of the ranking organization:	U.S. News & World Report LP
Address:	Washington DC, USA
Website of the ranking organization:	www.usnews.com
Type of organization:	commercial/for-profit



US News Best Global Universities Subject Rankings

■ Methodology

The **US News Best Global Universities Subject Rankings 2018** analyses 22 subject fields. The rankings are powered by Clarivate Analytics InCites (data for the five-year period 2011-2015). The number of ranking universities ranges from 200 to 600 (the latter in chemistry, clinical medicine, engineering and physics). US News subject rankings use 11 indicators (with different weights - depending on the subject).

Global research reputation (weights: 12.5% - 20% depending of subject)

Regional research reputation (weights: 12.5% - 20%)

Publications (weights: 10% - 17.5%)

Books (weights: 15% or N/A)

Conferences (weights: 5% or N/A)

Normalized citation impact (weights: 7.5% - 10%)

Total citations (weights: 7.5% - 15%)

Number of publications that are among the 10 percent most cited (weights: 7.5% - 10%)

Percentage of total publications that are among the 10 percent most cited (weights: 5% - 7.5%)

Number of highly cited papers that are among the top 1 percent most cited in their respective field (weights: 5% or N/A)

Percentage of total publications that are among the top 1 percent most highly cited papers (weights: 5% or N/A)

International collaboration (weights: 2.5% - 5%)

Percentage of total publications with international collaboration (weights: 2.5% - 5%).

Each indicator used in the subject rankings was based on bibliometric and global and regional reputation data compiled for that specific subject. For example, for the Best Global Universities for Clinical Medicine ranking, each of the 11 ranking factors used in the calculations was based on data and values for clinical medicine.

IREG Inventory of International University Rankings

REGIONAL UNIVERSITY RANKINGS

QS Arab Region University Rankings

QS Asia University Rankings

QS BRICS University Rankings

QS Emerging Europe & Central Asia University Rankings

QS Latin America University Rankings

THE Asia University Rankings

THE BRICS & Emerging Economies Rankings

THE Latin America University Rankings

US News Best Arab Region Universities Rankings

QS Arab Region University Rankings

■ Information on ranking

Name of the ranking:	QS Arab Region University Rankings		
Geographical scope:	regional: Arab Region		
Status of the ranking:	related to QS World University Rankings		
Name of person in charge of ranking:	Ben Sowter		
E-mail of person in charge of ranking:	ben@qs.com		
Website of the ranking:	www.topuniversities.com/university-rankings/		
	arab-region-university	y-rankings/2016	
Publication frequency:	annual		
First year of publication:	2011	Most recent year of publication: 2017	
Type of publication:	internet		
	print - special publication		
Internet users access to ranking:	free registration		
Main target groups:	employers		
	higher education institutions policymakers, governments and funding agencies		
Level of comparison:	institutional: 101		
Major dimensions covered:	employability	internationalization	
	reputation	research	
	teaching	web presence	
Structure of presentation:	standard presentation (league tables)		
Data sources:	data collected from HEIs by ranking organization		
	survey conducted exclusively by ranking organization third-party database: Elseviers' Scopus		
	other: Webometrics		
Quality assurance of ranking:	advisory board		
Website of the methodology:	www.topuniversities.com/arab-region-rankings/methodology		

Name of the ranking organization:	Quacquarelli Symonds Ltd (QS)
Address:	London Main Office, 1 Tranley Mews, Fleet Road London, NW3 2DG
Website of the ranking organization:	www.topuniversities.com/about-qs
Type of organization:	commercial/for-profit



QS Arab Region University Rankings

Methodology

The QS Arab Region University Rankings highlights 100 leading universities in this part of the world. The methodology for this ranking has been developed with the aim of reflecting specific challenges and priorities for institutions in the region, drawing on the following nine indicators.

Academic reputation (30%)

This is based on a major global survey of academics, who are asked to name the universities they believe to be producing the best work in their own field of expertise. Like the employer survey (below), this is a major component across all of the QS university rankings.

Employer reputation (20%)

This is based on a second major global survey, this time of graduate employers. Participants are asked to name the institutions they perceive to be producing the best graduates.

Faculty/student ratio (20%)

In the absence of an international standard by which to assess teaching quality, this indicator assesses the number of full-time academics employed relative to students enrolled. The aim is to give an indication of institutions' capability in terms of providing academic support.

Web impact (10%)

Based on the Webometrics ranking, this indicator reflects universities' online presence, providing an indication of their commitment to international engagement and communication.

Proportion of staff with a PhD (5%)

This is based on the proportion of faculty members holding a PhD or equivalent, reflecting the overall level of expertise and experience within the institution.

Citations per paper (5%)

Calculated using data from Scopus, this indicator assesses the number of citations per paper published, reflecting the impact of each institution's research.

Papers per faculty (5%)

Also based on the Scopus database, this measure relates to the number of papers published per faculty member, reflecting research productivity rates.

Proportion of international faculty (2.5%) and proportion of international students (2.5%)

These final two indicators reflect each institution's success in attracting academics and students from other countries, giving an indication of the international diversity of its learning environment.

QS Asia University Rankings

■ Information on ranking

Name of the ranking:		QS Asia University Rankings		
Geographical scope:	regional: Asia			
Status of the ranking:	autonomous/indep	autonomous/independent ranking		
Name of person in charge of ranking:	Ben Sowter	Ben Sowter		
E-mail of person in charge of ranking:	ben@qs.com	ben@qs.com		
Website of the ranking:	www.topuniversities.	com/asian-rankings		
Publication frequency:	annual			
First year of publication:	2009	Most recent year of publication: 2017		
Type of publication:	internet			
	print - special public	cation		
Internet users access to ranking:	open access			
Main target groups:	employers			
	higher education institutions			
	employers higher education institutions policymakers, governments and funding agencies students and parents institutional: 400			
	students and parents			
Level of comparison:	institutional: 400	Art		
Major dimensions covered:	employability	internationalization		
	reputation	research		
	teaching			
Structure of presentation:	standard presentation (league tables)			
Data sources:	survey conducted exclusively by ranking organization			
	third-party database	e (data not provided by HEI): Scopus		
Quality assurance of ranking:	advisory board			
-	certification			
Website of the methodology:	www.topuniversities	s.com/asia-rankings/methodology		

Name of the ranking organization:	Quacquarelli Symonds Ltd (QS)
Address:	London Main Office, 1 Tranley Mews, Fleet Road London, NW3 2DG
Website of the ranking organization:	www.topuniversities.com/about-qs
Type of organization:	commercial/for-profit



QS Asia University Rankings

■ Methodology

The **QS Asia University Rankings** highlights the top universities in Asia each year. The methodology used to create the ranking is similar to that used for the QS World University Rankings®, but with some additional indicators and adapted weightings. This set of criteria, developed in consultation with regional experts and stakeholders, is designed to reflect key priorities for universities in Asia.

Academic reputation (30%)

This is assessed using data from the large global survey of academics conducted by QS each year. The results of this survey, which asks academics to identify the leading universities in their own subject area, also feed into other rankings and reports produced by QS, including the QS World University Rankings and the QS World University Rankings by Subject. The aim is to give an indication of which universities hold the strongest reputation within the international academic community.

Employer reputation (20%)

This is again assessed using the results of a major international survey, this time of graduate employers, who are asked to identify the universities they perceive as producing the highest-quality graduates. The results of this survey are used to inform a number of other QS research projects, reflecting the importance of employability and employment prospects for today's university applicants and graduates.

Faculty/student ratio (15%)

This indicator assesses the ratio of full-time academic staff members employed per student enrolled. The aim is to give an idea of how much contact time and academic support students at the institution may expect to receive.

Citations per paper (10%) and papers per faculty (10%)

These two indicators are both assessed using data from the Scopus database of research publications and citations. The first assesses the number of citations per research paper published, aiming to give an idea of the impact each institution's research is having within the research community. The second assesses the number of research papers published per faculty member. This provides an indication of the overall research productivity of the university.

Staff with a PhD (5%)

This indicator assesses the proportion of academic staff members qualified to PhD level. This complements the faculty/student ratio indicator, both aiming to provide proxy measures of an institution's commitment to teaching.

Proportion of international faculty (2.5%) and proportion of international students (2.5%)

The final four indicators all aim to assess how 'international' each university is, reflecting the fact that internationalization is a major priority both for universities in Asia and in every world region. These two indicators assess the proportion of staff and students at the university who are classed as 'international'.

Proportion of inbound exchange students (2.5%) and proportion of outbound exchange students (2.5%)

These last two indicators offer additional insights into the internationalization activity at universities in Asia, assessing the relative size of each institution's inbound and outbound student exchange programs.

QS BRICS University Rankings

■ Information on ranking

Name of the ranking:	QS BRICS University Rankings	
Geographical scope:	regional: BRICS countries (Brasil, Russia, India, China, South Africa)	
Status of the ranking:	related to QS World University Rankings	
Name of person in charge of ranking:	Ben Sowter	
E-mail of person in charge of ranking:	ben@qs.com	
Website of the ranking:	www.topuniversities.com/university-rankings/brics-rankings/2018	
Publication frequency:	annual	
First year of publication:	2013 Most recent year of publication: 2017	
Type of publication:	internet	
	print - special publication	
Internet users access to ranking:	free registration	
Main target groups:	higher education institutions policymakers, governments and funding agencies	
	students and parents	
Level of comparison:	institutional: 300	
Major dimensions covered:	employability internationalization	
	reputation research	
	teaching	
Structure of presentation:	standard presentation (league tables)	
Data sources:	data collected from HEIs by ranking organization	
	survey conducted exclusively by ranking organization	
	third-party database: Scopus	
Quality assurance of ranking:	advisory board	
Website of the methodology:	www.topuniversities.com/brics-rankings/methodology	

Name of the ranking organization:	Quacquarelli Symonds Ltd (QS)
Address:	London Main Office, 1 Tranley Mews, Fleet Road London, NW3 2DG
Website of the ranking organization:	www.topuniversities.com/about-qs
Type of organization:	commercial/for-profit



QS BRICS University Rankings

■ Methodology

The **QS BRICS University Rankings** is an annual ranking of the top universities in the five BRICS countries – Brazil, Russia, India, China and South Africa. The project, developed by QS in collaboration with Russian news agency Interfax, emerged from a desire to better highlight and track progress made by each of the five BRICS countries in the higher education field, and to facilitate comparison of universities in nations that share certain key socio-economic dynamics. The eight indicators used to create the BRICS ranking are:

Academic reputation (30%)

This is based on analysis of QS's major global survey of academics, who are asked to identify the top-performing universities in their own field of expertise.

Employer reputation (20%)

This is based on QS's major global survey of graduate employers, who are asked to identify the universities they perceive as producing the best graduates.

Faculty/student ratio (20%)

This reflects the number of students enrolled per full-time academic faculty member employed. The aim is to give an indication of commitment to teaching and student support.

Staff with a PhD (10%)

Based on the proportion of academic staff members with a PhD, this indicator aims to assess how successful universities have been in recruiting highly qualified faculty members – a major priority for many institutions in the BRICS countries.

Papers per faculty (10%)

Calculated using data from Scopus, this indicator assesses research productivity, based on the number of research papers published per academic staff member.

Citations per paper (5%)

Again calculated using the Scopus database, this indicator aims to assess research impact, based on the frequency with which an institution's research is cited by other researchers.

International faculty (2.5%)

This score reflects the percentage of faculty members at the university who are international, to show how successful each institution has been in attracting academics from further afield.

International students (2.5%)

This last indicator reflects the percentage of students enrolled at the university who are international, giving a further indication of each institution's global appeal.

QS Emerging Europe & Central Asia University Rankings

■ Information on ranking

Name of the ranking:	QS Emerging Europe & Central Asia University Rankings	
Geographical scope:	regional: Eastern Europe & Central Asia	
Status of the ranking:	related to QS World University Rankings	
Name of person in charge of ranking:	Ben Sowter	
E-mail of person in charge of ranking:	ben@qs.com	
Website of the ranking:	www.topuniversities.com/university-rankings/eeca-rankings/2018	
Publication frequency:	annual	
First year of publication:	2014	Most recent year of publication: 2017
Type of publication:	internet	
	print - special publication	
Internet users access to ranking:	free registration	
Main target groups:	employers	
	higher education institutions	
	policymakers, governments and funding agencies students and parents	
Level of comparison:	institutional: 299	
Major dimensions covered:	employability	internationalization
	reputation	research
	teaching	web presence
Structure of presentation:	standard presentation (league tables)	
Data sources:	survey conducted exclusively by ranking organization	
	third-party database: Scopus	
	other: Webometrics	
Quality assurance of ranking:	advisory board	
Website of the methodology:	www.topuniversities.com/eeca-rankings/methodology	

Name of the ranking organization:	Quacquarelli Symonds Ltd (QS)
Address:	London Main Office, 1 Tranley Mews, Fleet Road London, NW3 2DG
Website of the ranking organization:	www.topuniversities.com/about-qs
Type of organization:	commercial/for-profit



QS Emerging Europe & Central Asia University Rankings

■ Methodology

The QS Emerging Europe & Central Asia (EECA) University Rankings uses a methodology adapted from the overall QS World University Rankings®, and similar to those used for QS's other regional rankings. QS EECA ranking compare universities on the nine areas of performance.

Academic reputation (30%)

As is the case for all of QS's university rankings, global reputation is assessed through two major international surveys. The first of these is the annual QS Global Academic Survey, which asks academics worldwide to identify the institutions they perceive to be conducting the best work in the own field.

Employer reputation (20%)

Alongside the academic survey, the QS Global Employer Survey asks graduate employers across the world to name the institutions they believe to be producing the best graduates in their sector. This indicator aims to reflect intuitional reputation in the global graduate employment market.

Faculty/student ratio (15%)

In lieu of a reliable or practical method by which to assess and compare teaching quality internationally, faculty/student ratio is considered. This is based on the number of students enrolled per full-time academic staff member, aiming to give an indication of each institution's commitment to providing high standards of academic support.

Papers per faculty (10%)

Calculated using data from Elsevier's Scopus – the world's largest abstract and citation database of peer-reviewed academic literature – this indicator reflects research productivity.

Web impact (10%)

Based on the Webometrics ranking, this indicator reflects the extent of each institution's online presence, one aspect of their commitment to international engagement and communication.

Staff with a PhD (5%)

A priority and growing strength for many leading universities in the EECA region is the recruitment of academic staff members qualified to PhD level or the equivalent. Progress in this area is assessed by calculating the proportion of faculty members at this level.

Citations per paper (5%)

Again based on data from the Scopus database, this indicator aims to assess research impact, based on the frequency with which an institution's published papers are cited by other researchers around the world.

International faculty (2.5%) and international students (2.5%)

The last two indicators are based on the proportion of faculty members and students who are international.

QS Latin America University Rankings

■ Information on ranking

Name of the ranking:	QS Latin America University Rankings	
Geographical scope:	regional: Latin America	
Status of the ranking:	regional: Latin America related to QS World University Rankings Ben Sowter ben@qs.com www.topuniversities.com/university-rankings/	
Name of person in charge of ranking:	Ben Sowter REU	
E-mail of person in charge of ranking:	ben@qs.com	
Website of the ranking:	www.topuniversities.com/university-rankings/	
	latin-american-univers	sity-rankings/2018
Publication frequency:	annual	
First year of publication:	2011	Most recent year of publication: 2017
Type of publication:	internet	
	print - special publica	ition
Internet users access to ranking:	free registration	
Main target groups:	employers	
	higher education inst	itutions
	policymakers, governments and funding agencies	
	students and parents	
Level of comparison:	institutional: 385	
Major dimensions covered:	employability	internationalization
	reputation	research
	teaching	web presence
Structure of presentation:	standard presentation (league tables)	
Data sources:	survey conducted exclusively by ranking organization	
	third-party database:	Scopus
	other: Webometrics	
Quality assurance of ranking:	advisory board	
	certification	
Website of the methodology:	www.topuniversities.	com/latin-america-rankings/methodology

Name of the ranking organization:	Quacquarelli Symonds Ltd (QS)
Address:	London Main Office, 1 Tranley Mews, Fleet Road London, NW3 2DG
Website of the ranking organization:	www.topuniversities.com/about-qs
Type of organization:	commercial/for-profit



QS Latin America University Rankings

Methodology

The **QS Latin America University Rankings** shines a spotlight on the top universities in Latin America based on eight key indicators. The methodology is adapted from that used to compile the QS World University Rankings®, with several additional criteria included to enable more in-depth comparison based on regional priorities.

Academic reputation (30%)

Taken from the annual survey conducted by QS designed to evaluate the perceptions of academics from around the world regarding teaching and research quality at the universities. Over 70,000 responses were recorded globally.

Employer reputation (20%)

The Employer Reputation metric is based on over 30,000 responses to the QS Employer Survey, and asks employers to identify those institutions from which they source the most competent, innovative, effective graduates. International and domestic responses contribute 50% each to an institution's final score.

Faculty/student ratio (10%)

This is the ratio between the number of academic staff and number of students. A higher number of teachers per student is an indirect indicator of the commitment of the institutions to high-quality teaching.

Staff with a PhD (10%)

This indicator attempts to assess the quality of training of the academic staff, detecting the proportion of them that have reached the highest level of education in their area of expertise. This is an indirect measure of the commitment of universities to high-quality teaching and research.

Papers per faculty (5%)

This indicator seeks to determine the average number of scientific publications (papers) produced per faculty and evaluates the research productivity of the institutions. The data is extracted from Scopus.

Citations per paper (10%)

This ratio measures the average number of citations obtained per publication, and is an estimate of the impact and quality of the scientific work done by universities. Data indexed by Scopus is also used. The paper and citation counts are normalized, ensuring that citations achieved in each of the five broad faculty areas are weighted equally.

Web impact (5%)

This indicator seeks to assess the effectiveness with which institutions are making use of new technologies. Baseline information is provided by the Ranking Web of Universities (www.webometrics.info), although the results are refactored to exclude the Excellence indicator, which is already considered in the metrics related to scientific research.

International research network (10%)

To calculate this indicator the Simpson's Diversity Index, a widely used metric in the environmental sciences, has been adapted to estimate the probability that any two randomly selected international research partners for a given institution belong to different countries.

THE Asia University Rankings

■ Information on ranking

Name of the ranking:	THE Asia University Rankings	
Geographical scope:	regional: Asia	
Status of the ranking:	related to THE World University Rankings	
Name of person in charge of ranking:	Phil Baty	
E-mail of person in charge of ranking:	phil.baty@tesglobal.com	
Website of the ranking:	www.timeshighereducation.com/world-university-rankings/2017/regional-ranking	
Publication frequency:	annual	
First year of publication:	2013 Most recent year of publication: 2017	
Type of publication:	internet	
	print - special publication	
	print - magazine: Times Higher Education	
Internet users access to ranking:	open access	
Main target groups:	higher education institutions policymakers, governments and funding agencies students and parents	
Level of comparison:	institutional: 201	
Major dimensions covered:	internationalization knowledge transfer	
	reputation teaching	
Structure of presentation:	standard presentation (league tables)	
Data sources:	data collected from HEIs by ranking organization	
	survey conducted exclusively by ranking organization	
	third-party database: Scopus	
Quality assurance of ranking:	certification	
Website of the methodology:	www.timeshighereducation.com/	
	world-university-rankings/asia-university-rankings-2017-methotology	

Name of the ranking organization:	Times Higher Education
Address:	TES Global Limited, 26 Red Lion Square, London WC1R 4HQ
Website of the ranking organization:	https://www.timeshighereducation.com/
Type of organization:	commercial/for-profit



THE Asia University Rankings

■ Methodology

In calculating the top universities in Asia, the **Times Higher Education Asia University Rankings 2017** use the same 13 performance indicators as the THE World University Rankings, but they are recalibrated to reflect the attributes of Asia's institutions.

TEACHING (the learning environment) 30%

Reputation survey (10%)

The Academic Reputation Survey 2017 data are combined with the results of the 2016 survey, giving over 20,000 responses.

Staff-to-student ratio (4.5%)

Doctorate-to-bachelor's ratio (2.25%)

Doctorates-awarded-to-academic-staff ratio (6%)

Institutional income (2.25%)

RESEARCH (volume, income and reputation) 30%

Reputation survey (15%)

Indicator is based on the responses to annual Academic Reputation Survey.

Research income (7.5%)

This indicator is fully normalised to take account of each university's distinct subject profile.

Research productivity (7.5%)

To measure productivity THE counts the number of papers published in the academic journals indexed by Elsevier's Scopus database per scholar, scaled for institutional size and normalised for subject.

CITATIONS (research influence) 30%

In 2017 THE bibliometric data supplier Elsevier examined more than 56 million citations to 11.9 million journal articles, conference proceedings and books and book chapters published over five years. The data include the 23,000 academic journals indexed by Elsevier's Scopus database and all indexed publications between 2011 and 2015. Citations to these publications made in the six years from 2011 to 2016 are also collected.

INTERNATIONAL OUTLOOK (staff, students, research) 7.5%

International-to-domestic-student ratio (2.5%)

International-to-domestic-staff ratio (2.5%)

International collaboration (2.5%)

The proportion of a university's total research journal publications that have at least one international co-author and reward higher volumes.

INDUSTRY INCOME (knowledge transfer) 2.5%

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 BRICS & Emerging Economies Rankings

■ Information on ranking

Name of the ranking:	THE BRICS & Emerging Economies Rankings		
Geographical scope:	regional: BRICS & Emerging Economies countries		
Status of the ranking:	related to THE World University Rankings		
Name of person in charge of ranking:	Phil Baty		
E-mail of person in charge of ranking:	phil.baty@tesglobal.com		
Website of the ranking:	www.timeshighereducation.com/world-university-rankings/2017/		
	brics-and-emerging-eco	onomies-university-rankings	
Publication frequency:	annual		
First year of publication:	2014	Most recent year of publication: 2017	
Type of publication:	internet print - special publication		
	print - magazine, news	spaper: Times Higher Education	
Internet users access to ranking:	open access		
Main target groups:	higher education institutions		
	policymakers, governments and funding agencies students and parents		
Level of comparison:	institutional: 300		
Major dimensions covered:	internationalization k	knowledge transfer	
	reputation r	research	
	teaching		
Structure of presentation:	standard presentation (league tables)		
Data sources: data collected from HEIs by ranking organization		Els by ranking organization	
	survey conducted exclusively by ranking organization		
	third-party database: S	Scopus	
Quality assurance of ranking:	certification		
Website of the methodology:	· ·	ation.com/world-university-rankings/	
	brics-and-emerging-economies-university-rankings-2017-methodology		

Name of the ranking organization:	Times Higher Education
Address:	TES Global Limited, 26 Red Lion Square, London WC1R 4HQ
Website of the ranking organization:	www.timeshighereducation.com/
Type of organization:	commercial/for-profit



THE BRICS & Emerging Economies Rankings

■ Methodology

The **Times Higher Education BRICS & Emerging Economies University Rankings 2017** includes only institutions in countries classified as "advanced emerging", "secondary emerging" or "frontier" by the FTSE, including the BRICS nations of Brazil, Russia, India, China and South Africa. The rankings use the same 13 performance indicators as the flagship THE World University Rankings, but they are recalibrated to reflect the development priorities of universities in emerging economies.

TEACHING (the learning environment) 30%

Reputation survey (10%)

The most recent Academic Reputation Survey that underpins this category was carried out in January to March 2016.

Staff-to-student ratio (4.5%)

Doctorate-to-bachelor's ratio (2.25%)

Doctorates-awarded-to-academic-staff ratio (6%)

Institutional income (2.25%)

RESEARCH (volume, income and reputation) 30%

Reputation survey (15%)

Indicator is based on the responses to annual Academic Reputation Survey.

Research income (7.5%)

Research productivity (7.5%)

To measure productivity THE counts the number of papers published in the academic journals indexed by Elsevier's Scopus database per scholar, scaled for institutional size and normalised for subject.

CITATIONS (research influence) 30%

In 2017 THE bibliometric data supplier Elsevier examined more than 56 million citations to 11.9 million journal articles, conference proceedings and books and book chapters published over five years. The data include the 23,000 academic journals indexed by Elsevier's Scopus database and all indexed publications between 2011 and 2015. Citations to these publications made in the six years from 2011 to 2016 are also collected.

INTERNATIONAL OUTLOOK (staff, students, research) 7.5%

International-to-domestic-student ratio (2.5%)

International-to-domestic-staff ratio (2.5%)

International collaboration (2.5%)

The proportion of a university's total research journal publications that have at least one international co-author and reward higher volumes.

INDUSTRY INCOME (knowledge transfer) 2.5%

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 Latin America University Rankings

■ Information on ranking

Name of the ranking:	THE Latin America University Rankings		
Geographical scope:	regional: Latin America		
Status of the ranking:	related to THE World University Rankings		
Name of person in charge of ranking:	Phil Baty		
E-mail of person in charge of ranking:	phil.baty@tesglobal.com		
Website of the ranking:	www.timeshighereducation.com/world-university-rankings/2017/		
	latin-america-university-ranking		
Publication frequency:	annual		
First year of publication:	2016 Most recent year of publication: 2017		
Type of publication:	internet		
	print - magazine, newspaper: Times Higher Education		
Internet users access to ranking:	open access		
Languages of publication:	English		
Main target groups:	higher education institutions		
	policymakers, governments and funding agencies		
	students and parents		
Level of comparison:	institutional: 81		
Major dimensions covered:	internationalization knowledge transfer		
	reputation research		
	teaching		
Structure of presentation:	standard presentation (league tables)		
Data sources:	data collected from HEIs by ranking organization		
	survey conducted exclusively by ranking organization		
	third-party database: Elseviers' Scopus		
Quality assurance of ranking:	certification		
Website of the methodology:	www.timeshighereducation.com/world-university-rankings/		
	latin-america-university-rankings-2017-methodology		

Name of the ranking organization:	Times Higher Education
Address:	TES Global Limited, 26 Red Lion Square, London WC1R 4HQ
Website of the ranking organization:	www.timeshighereducation.com/
Type of organization:	commercial/for-profit



THE Latin America University Rankings

■ Methodology

In calculating the top universities in Latin America, the Times Higher Education Latin America University Rankings 2017 use the same 13 performance indicators as the THE World University Rankings, but they are recalibrated to reflect the qualities of Latin America's institutions.

TEACHING (the learning environment) 36%

Reputation survey (15%)

The most recent Academic Reputation Survey (run annually) that underpins this category was carried out in January to March 2017. It examined the perceived prestige of institutions in teaching.

Staff-to-student ratio (5%)

Doctorate-to-bachelor's ratio (5%)

Doctorates-awarded-to-academic-staff ratio (5%)

Institutional income (6%)

RESEARCH (volume, income and reputation) 34%

Reputation survey (18%)

Indicator is based on the responses to annual Academic Reputation Survey.

Research income (6%)

This indicator is fully normalised to take account of each university's distinct subject profile.

Research productivity (6%)

To measure productivity THE counts the number of papers published in the academic journals indexed by Elsevier's Scopus database per scholar, scaled for institutional size and normalised for subject.

CITATIONS (research influence) 20%

THE examine research influence by capturing the number of times a university's published work is cited by scholars globally. In 2017 THE bibliometric data supplier Elsevier examined more than 56 million citations to 11.9 million journal articles, conference proceedings and books and book chapters published over five years. The data include the 23,000 academic journals indexed by Elsevier's Scopus database and all indexed publications between 2011 and 2015. Citations to these publications made in the six years from 2011 to 2016 are also collected.

INTERNATIONAL OUTLOOK (staff, students, research) 7,5%

International-to-domestic-student ratio (2.25%)

International-to-domestic-staff ratio (2.25%)

International collaboration (2.25%)

The proportion of a university's total research journal publications that have at least one international co-author and reward higher volumes.

INDUSTRY INCOME (knowledge transfer) 2.25%

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.

US News Best Arab Region Universities Rankings

■ Information on ranking

Name of the ranking:	US News Best Arab Region Universities Rankings		
Geographical scope:	regional: Arab Region		
Status of the ranking:	autonomous/independent ranking		
Name of person in charge of ranking:	Robert Morse		
E-mail of person in charge of ranking:	rmorse@usnews.com		
Website of the ranking:	www.usnews.com/education/arab-region-universities		
Publication frequency:	annual		
First year of publication:	2015 Most recent year of publication: 2016		
Type of publication:	internet		
Internet users access to ranking:	open access		
Main target groups:	higher education institutions		
	policymakers, governments and funding agencies		
	students and parents		
Level of comparison:	institutional: 124		
Major dimensions covered:	research		
Structure of presentation:	standard presentation (league tables)		
Data sources:	third-party database: Scopus		
	other: Scopus; Ipsos (academic and employer reputation surveys)		
Quality assurance of ranking:	advisory board		
Website of the methodology:	www.usnews.com/education/arab-region-universities/articles/methodology		

Name of the ranking organization:	U.S. News & World Raport LP
Address:	Washington DC, USA
Website of the ranking organization:	www.usnews.com
Type of organization:	commercial/for-profit



US News Best Arab Region Universities Rankings

■ Methodology

The **US News Best Arab Region Universities Rankings** is based on 12 indicators grouped in four areas. The rankings are based on bibilometric data and research metrics provided by Scopus.

REPUTATION METRICS

For the 2016 edition of the Best Arab Region Universities rankings, U.S. News partnered with Ipsos in MENA to include two separate reputation surveys of 124 universities in the Arab.

Academic reputation score (12.5%) - The first survey conducted in the spring and summer of 2015 was of educators in the Arab region who rated the 124 universities based on their academic quality.

Employer reputation score (12.5%) - The second survey conducted in the spring and summer of 2015 was of employers in the Arab region who were human resources and recruitment directors who recruited from the 124 universities.

OUTPUT METRIC

Fractionalized publications (22.5%) - US News chose to use fractionalized publications in this year's rankings, instead of whole counts, which gives a full credit to each co-author at each institution. Under fractional counting, if a publication has multiple co-authors, "credit" for that publication was divided by the number of those co-authors.

CITATION AND IMPACT METRICS

Cited publications (3.75%) - This indicator represents the total number of publications for that school that have been cited at least once.

Percent of publications cited (3.75%) - This indicator provides a breakdown of what percentage of an institution's total publications in a given year and subject area have thus far been cited at least once.

Fractionalized citations (15%) - This indicator represents the total number of citations to earlier publications made in a new journal article or another publication since the original articles were published.

Field-weighted citation impact (7.5%) - This indicator is a metric that is used as a proxy to measure the quality of a paper. It compares the actual number of citations received by a publication with the expected number of citations for publications of the same document type (article, review or conference proceeding paper), publication year and subject.

RESEARCH EXCELLENCE METRICS

Number of highly cited publications in top 10 percent (3.75%) - This indicator reflects the number of papers that have been assigned as being in the top 10 percent of the most highly cited papers in the world in their respective fields.

Percentage of total publications in top 10 percent (3.75%) - This indicator is the percentage of a university's total papers that are in the top 10 percent of the most highly cited papers in the world (per field and publication year).

Number of highly cited publications in top 25 percent (7.5%) - This indicator reflects the number of papers that have been assigned as being in the top 25 percent of the most highly cited papers in the world in their respective fields.

Percentage of total publications in top 25 percent (7.5%) - This indicator is the percentage of a university's total papers that are in the top 25 percent of the most highly cited papers in the world (per field and publication year).

IREG Inventory of International University Rankings

BUSINESS SCHOOL RANKINGS

Bloomberg Businessweek Best Business Schools Ranking
Business of Fashion Global Fashion School Rankings
FT European Business School Rankings
FT Executive MBA Ranking
FT Global MBA Ranking
QS Global MBA Rankings
The Economist Executive MBA Ranking
The Economist Full time MBA Ranking

Bloomberg Businessweek Best Business Schools Ranking

■ Information on ranking

Name of the ranking:	Bloomberg Businessweek Best Business Schools Ranking			
Geographical scope:	global			
Status of the ranking:	autonomous / independent ranking			
Website of the ranking:	www.bloomberg.com/graphics/2017-best-international-business-schools/			
Publication frequency:	annual			
First year of publication:	1988 Most recent year of publication: 2017			
Type of publication:	internet			
Internet users access to ranking:	open access			
Main target groups:	employers			
	higher education institutions policymakers, governments and funding agencies students and parents			
Level of comparison:	institutional: 31			
	other: business schools			
Major dimensions covered:	employability			
	reputation			
	teaching			
Structure of presentation:	standard presentation (league tables)			
Data sources:	survey conducted exclusively by ranking organization			
Quality assurance of ranking:	periodic consultancy			
Website of the methodology:	www.bloomberg.com/graphics/2017-best-international-business-schools/			

■ Information on ranking organization

Name of the ranking organization:	Bloomberg Businessweek
Website of the ranking organization:	www.bloomberg.com
Type of organization:	commercial/for-profit



Website of the ranking:

Bloomberg Businessweek Best Business Schools Ranking

■ Methodology

The **Bloomberg Businessweek Best Business Schools Ranking** of international MBA programs is based on surveys of recruiters, alumni, and students, as well as recent graduates' success at landing jobs and securing high starting wages.

Employer Survey (35%)

To assess how well MBA programs prepare graduates to get the jobs they want, Bloomberg Businessweek (BB) surveyed recruiters from companies that hire MBAs. 11,801 recruiters were invited to take our survey; 686 recruiters at more than 400 companies completed it. BB partnered with Cambria Consulting Inc. of Boston to run the survey, along with full-time and part-time alumni and student surveys. Recruiters were asked to identify up to 10 schools at which they had significant recruiting experience in the past five years. We then asked the recruiters to assess how well these schools' graduates rate with regard to specific qualities they deem important when they recruit MBAs.

Alumni Survey (30%)

To examine the impact of the MBA on alumni job outcomes, our Alumni Survey sought responses from alumni who graduated from 2009 to 2011.

We recorded nearly 10,000 survey responses from alumni, excluding surveys from alumni who had previously completed them. We also included data from our 2016 Alumni Survey to diversify the alumni feedback that contributes to this portion of the rankings.

Student Survey (15%)

Recent graduates are the best judges of many MBA program features, such as campus climate, effectiveness of career services, and responsiveness of faculty and administrators. That's why BB includes the Student Survey in rankings methodology. BB recorded 9,461 survey responses from graduates in the class of 2017. To be included in our rankings, each school was required to have at least 30 students respond to our survey; larger programs were required to reach a threshold ranging from 15 percent to 40 percent.

Job Placement Rate (10%)

BB defines the job placement rate as the percentage of graduates who secured full-time employment within three months of graduation, out of all the graduates who sought it. Schools provided BB with job-placement and salary data for the class of 2016, representing all graduates whose job outcomes they were able to track. (Class of 2017 data were not ready when we collected them.) Entrepreneurs, those continuing their education, those who were already employed prior to graduation, and others who didn't pursue full-time jobs were excluded from our analysis. To qualify, schools were required to have at least 10 graduates seeking employment after graduation.

Starting Salary (10%)

A further key measure of a school's success is how much compensation its newly minted graduates fetch in the labor market. Schools record these data, which they shared with BB for rankings. BB looked at compensation within three months of graduation.

BoF Global Fashion School Rankings

■ Information on ranking

Name of the ranking:	Business of Fashion's Global Fashion School Rankings		
Geographical scope:	global		
Status of the ranking:	autonomous/independent ranking		
Website of the ranking:	www.businessoffashion.com/education/rankings/2017		
Publication frequency:	annual		
First year of publication:	2015	Most recent year of publication:	2017
Type of publication:	internet		
Internet users access to ranking:	open access		
Main target groups:	employers		
	higher education institutions		
	students and parents		
Level of comparison:	fields or subject: 50		
Major dimensions covered:	innovation		
	teaching		
Structure of presentation:	standard presentation (league tables)		
Data sources:	third-party database		
Quality assurance of ranking:	periodic consultancy		
Website of the methodology:	www.businessoffashion.com/education/		
	rankings/2017/methodology?type=bachelors		

Name of the ranking organization:	The Business of Fashion		
Address:	Moray House, 23-31 Great Titchfield Street - 6th Floor,		
	London W1W 7PA United Kingdom		
Website of the ranking organization:	www.businessoffashion.com		
Type of organization:	commercial		



BoF Global Fashion School Rankings

Methodology

The **Business of Fashion's Global Fashion School Rankings** aim to provide an objective assessment of the top undergraduate fashion and graduate fashion programmes around the world. The BoF Global Fashion School Rankings are based on three criteria and nine indicators:

GLOBAL INFLUENCE (30%)

Reputation (10%) Composite score based on the total number of times the school is ranked top three in having the most creative, most business savvy, and most compelling graduates according to a global pool of fashion school academics.

Selectivity (10%) % Acceptance rate - Proportion of admitted students to applicants; % Yield - Proportion of admitted applicants who decided to enroll in the school as a measure of desirability.

Awards (10%) Composite score based on the average number of students who have won or been finalists of an international fashion award.

LEARNING EXPERIENCE (35%)

Student Body (10%) Student diversity score - numerical average value applied to each school's student satisfaction with peer diversity on a scale of 1-5; International enrollment - proportion of international students in class as an indication of global reach and perspective; Weighted overall student quality score - numerical average value applied to student satisfaction with overall student body on a scale of 1-5.

Resources (10%) The percentage of students that participate in work or internship placements and a numerical average value applied to student satisfaction with all resources (library/study materials, workrooms, campus/buildings, technology and IT, financial aid) on a scale of 1-5.

Teaching (15%) Numerical average value applied to student satisfaction with curriculum and teaching (technical skills courses, digital and IT courses, marketing courses, business courses, environment/sustainability courses, global/diverse content, teachers) on a scale of 1-5.

LONG-TERM VALUE (35%)

Careers (10%) Graduation rate: proportion of students enrolled who successfully complete the intended programme; Weighted careers satisfaction score: numerical average value applied to student satisfaction with career services, quality of recruiters, and networking events/career fairs on a scale of 1-5.

Preparedness (20%) Job within 6 months: percent of alumni that obtain a job within 6 months of graduation from institution; Career preparedness score: numerical average value applied to how well prepared alumni felt to join the workforce after graduating on a scale from 1-5; Employability score: composite score based on the total number of times the school is ranked top three in having the most creative, most business savvy, and most compelling graduates according to a global pool of fashion HR Professional.

Alumni Network (5%) Numerical average value applied to satisfaction with alumni network on a scale of 1-5 based on accessibility of alumni, global reach and level of activity.

FT European Business School Rankings

■ Information on ranking

Name of the ranking:	FT European Business School Rankings			
Geographical scope:	regional			
Status of the ranking:	autonomous / independent ranking			
Name of person in charge of ranking:	Judith Pizer			
Website of the ranking:	http://rankings.ft.com	n/businessschoolrankings/		
	european-business-s	school-rankings-2017		
Publication frequency:	annual			
First year of publication:	2004	Most recent year of publication: 2017		
Type of publication:	internet			
	print - magazine, newspaper: Financial Times			
Internet users access to ranking:	open access			
Main target groups:	employers			
	higher education institutions			
	students and parents			
Level of comparison:	fields or subject: 95			
Major dimensions covered:	employability internationalization			
	reputation	research		
	teaching	other: salaries, career development		
Structure of presentation:	multi-indicator ranking			
	standard presentation (league tables)			
Data sources:	other: FT rankings			
Quality assurance of ranking:	advisory board			
	periodic consultancy			
Website of the methodology:	www.ft.com/european-business-schools/ranking-key			

■ Information on ranking organization

Name of the ranking organization:	The Financial Times Limited
Address:	Number One Southwark Bridge, London, SE1 9HL
Website of the ranking organization:	www.ft.com
Type of organization:	commercial/for-profit

FINANCIAL TIMES

Website of the ranking:

FT European Business School Rankings

■ Methodology

The **Financial Times European Business Schools Ranking** is a composite ranking based on the combined performance of Europe's leading schools across the five main rankings of programmes published by the FT in 2017: MBA, Executive MBA, Masters in Management (MiM) and the two rankings of non-degree executive education programmes.

A European schools rank is produced for each of these main rankings. MBA, EMBA and MiM account for 25 per cent each of each school's total performance. For executive education, the scores obtained for customised and open programmes each account for 12.5 per cent.

Schools ranked with a joint programme receive a proportional share of the programme's indexed score. For example, Essec gets 50 per cent of the score achieved by its joint EMBA programme with Mannheim.

Below: Weights for ranking criteria are shown in brackets as a percentage. All other data are for information only.

MBA

European rank (25%) - Position among European schools that took part in the 2017 FT global MBA ranking. Salary today \$: average alumni salary three years after graduation, US\$ by purchasing power parity (PPP). Includes weighted data from the current and two previous years, where available.

Salary increase %: average difference in alumni salary pre-MBA to today, three years after graduation.

EMBA

European rank (25%) - Position among European schools that took part in the 2017 EMBA ranking.

Salary today \$: average three years after graduation, US\$ PPP. Includes weighted data from the current and two previous years, where available.

Salary increase %: average difference in alumni salary pre-EMBA to today, three years after graduation.

MASTERS IN MANAGEMENT

European rank (25%) - Position among European schools that participated in 2017 FT MiM ranking.

Salary today \$: average salary three years after graduation, US\$ PPP. Includes weighted data from the current and two previous years, where available.

Salary increase %: average difference in alumni salary between graduation and today, three years on.

EXECUTIVE EDUCATION

Open programmes (12.5%)

Position among European schools that participated in the FT ranking of open-enrolment programmes in 2017.

Custom programmes (12.5%)

Position among European schools that participated in the FT ranking of customised programmes in 2017.

FT Executive MBA Ranking

■ Information on ranking

Name of the ranking:	FT Executive MBA Ranking		
Geographical scope:	global		
Status of the ranking:	autonomous / independent ranking		
Name of person in charge of ranking:	Judith Pizer		
Website of the ranking:	http://rankings.ft.com/businessschoolrankings/executive-mba-ranking-2017		
Publication frequency:	annual		
First year of publication:	2011	Most recent year of publication: 2017	
Type of publication:	internet		
	print - magazine, newspaper: Financial Times		
Internet users access to ranking:	open access		
Main target groups:	employers		
	higher education institutions		
	policymakers, governments and funding agencies		
Level of comparison:	study programs: 100		
Major dimensions covered:	employability internationalization		
	research	other: salaries, career development	
Structure of presentation:	multi-indicator ranking		
	standard presentation (league tables)		
Data sources:	survey conducted exclusively by ranking organization		
	survey of HEIs staff or students by ranking organization in collaboration with a HEI		
Quality assurance of ranking:	periodic consultancy		
Website of the methodology:	www.ft.com/content/08b8cfec-a512-11e7-8d56-98a09be71849		

■ Information on ranking organization

Name of the ranking organization:	The Financial Times Limited
Address:	Number One Southwark Bridge, London, SE1 9HL
Website of the ranking organization:	www.ft.com
Type of organization:	commercial/for-profit

FINANCIAL TIMES

FT Executive MBA Ranking

Methodology

The FT Executive MBA Ranking consist of 16 indicators. All participating schools meet the FT's entry criteria, including being accredited by Equis or the AACSB.

Salary today (20%) Average salary three years after graduation.

Salary increase (20%) - Average difference in salary between before the EMBA and now. Half of this figure is calculated according to the absolute salary increase and half according to the percentage increase relative to pre-EMBA salary.

Career progress (5%) - Calculated according to changes in the level of seniority and the size of company alumni work in now, versus before their EMBA.

Work experience (5%) - A measure of pre-EMBA experience according to the seniority of positions held, number of years in each position, company size and overseas work experience.

Aims achieved (5%) - The extent to which alumni fulfilled their goals or reasons for doing an EMBA.

Female faculty (3%) - Percentage of female faculty.

Female students (3%) - Percentage of female students on the program.

Women on board (1%) - Percentage of female members of the advisory board.

International faculty (5%) - Calculated according to the diversity of faculty by citizenship and the percentage whose citizenship differs from their country of employment.

International students (5%) - The percentage of current EMBA students whose citizenship and country of residence differs from the country in which they study, as well as their diversity by citizenship.

International board (2%) - Percentage of the board whose citizenship differs from the country in which the business school is situated.

International course experience (5%) - Percentage of classroom teaching hours that are conducted outside the country in which the business school is situated.

Languages (1%) - Number of languages required upon graduation. *Programme not fully available in English.

Faculty with doctorates (5%) - Percentage of full-time faculty with a doctoral degree.

PhD graduates (5%) - Number of doctoral graduates from each business school during the past three years. The figure in brackets is the percentage of these graduates who took up faculty positions at a school in the top 50 of the full-time MBA ranking.

FT research rank (10%) - Calculated according to the number of articles published by a school's current full-time faculty members in 50 academic and practitioner journals between January 2014 and July 2017. The rank combines the absolute number of publications with the number weighted relative to the faculty's size.

For all gender-related criteria, schools with a 50:50 (male/female) composition receive the highest score.

FT Global MBA Ranking

■ Information on ranking

Name of the ranking:	FT Global MBA Ran	ıking	
Geographical scope:	global		
Status of the ranking:	autonomous / independent ranking		
Name of person in charge of ranking:	Judith Pizer		
Website of the ranking:	http://rankings.ft.com/businessschoolrankings/global-mba-ranking-2017		
Publication frequency:	annual		
First year of publication:	Most recent year of publication: 2017		
Type of publication:	internet		
	print - magazine, newspaper: Financial Times		
Internet users access to ranking:	open access		
Main target groups:	employers		
	higher education institutions		
	students and parents		
Level of comparison:	study programs: 100		
Major dimensions covered:	employability internationalization		
	research	research	
	teaching	other: salaries, career development	
Structure of presentation:	multi-indicator ranking		
	standard presentation (league tables)		
Data sources:	data collected from HEIs by third-party agency: KPMG		
	survey of HEIs staff or students by ranking organization in collaboration with a HE		
	third-party database: Elseviers' Scopus		
Quality assurance of ranking:	periodic consultancy		
Website of the methodology:	www.ft.com/content/72b3a752-d9be-11e6-944b-e7eb37a6aa8e		

■ Information on ranking organization

Name of the ranking organization:	The Financial Times Limited
Address:	Number One Southwark Bridge, London, SE1 9HL
Website of the ranking organization:	www.ft.com
Type of organization:	commercial/for-profit

FINANCIAL TIMES

FT Global MBA Ranking

Methodology

The **FT Global MBA Ranking** consist of 20 indicators. All participating schools meet the FT's entry criteria, including being accredited by Equis or the AACSB.

Weighted salary (20%) - Average alumnus salary three years after graduation.

Salary increase (20%) - Average difference in alumni salary before the MBA to now.

Value for money (3%) - Calculated using salary today, course length, fees and other costs, including lost income during the MBA.

Career progress (3%) - Calculated according to changes in the level of seniority and the size of company alumni work in now, compared with before their MBA.

Aims achieved (3%) - The extent to which alumni fulfilled their stated goals or reasons for doing an MBA.

Careers service (2%) - Effectiveness of the school careers service in terms of career counselling, personal development, networking events, internship search and recruitment, as rated by their alumni.

Employed at three months (2%) - Percentage of the most recent graduating class who had found employment or accepted a job offer within three months of completing their studies.

Alumni recommend (2%) - Calculated according to selection by alumni of three schools from which they would recruit MBA graduates.

Female faculty (2%) - Percentage of female faculty. For the three gender-related criteria, schools with a 50:50 (male/female) composition receive the highest possible score.

Female students (2%) - Percentage of female students on the full-time MBA.

Women on board (1%) - Percentage of female members on the school's advisory board.

International faculty (4%) - Calculated according to the diversity of faculty by citizenship and the percentage whose nationality differs from their country of employment..

International students (4%) - Calculated according to the diversity of current MBA students by citizenship and the percentage whose nationality differs from the country in which they study.

International board (2%) - Percentage of the board whose citizenship differs from the country in which the school is based.

International mobility (6%) - Based on alumni citizenship and the countries where they worked before their MBA, on graduation and three years after.

International course experience (3%) - Calculated on whether the most recent graduating class completed exchanges, research projects, study tours and company internships in countries other than where the school is based.

Languages (1%) - Number of extra languages required on graduation.

Faculty with doctorates (5%) - Percentage of full-time faculty with a doctoral degree.

PhD graduates (5%) - Number of doctoral graduates from each business school during the past three years.

FT research rank (10%) - Calculated according to the number of articles published by current full-time faculty members in 50 selected academic and practitioner journals between January 2014 and October 2016.

QS Global MBA Rankings

■ Information on ranking

Name of the ranking:	QS Global MBA Rankings		
Geographical scope:	global		
Status of the ranking:	autonomous / independent ranking		
Name of person in charge of ranking:	Ben Sowter		
E-mail of person in charge of ranking:	ben@qs.com		
Website of the ranking:	www.topuniversities.c	com/university-rankings/mba-rankings/global/2018	
Publication frequency:	annual		
First year of publication:	2012 Most recent year of publication: 2017		
Type of publication:	internet		
Internet users access to ranking:	open access		
Main target groups:	employers		
	higher education institutions		
	policymakers, governments and funding agencies students and parents		
Level of comparison:	study programs: 232		
Major dimensions covered:	employability internationalization		
	reputation	research	
	teaching	other: gender balance	
Structure of presentation:	multi-indicator rankir	ng	
	standard presentation (league tables)		
Data sources:	data collected from HEIs by ranking organization		
	survey conducted exclusively by ranking organization		
Quality assurance of ranking:	advisory board		
	periodic consultancy		
Website of the methodology:	www.topuniversities.com/mba-rankings/methodology		
0,	·	0,	

Name of the ranking organization:	Quacquarelli Symonds Ltd (QS)
Address:	London Main Office, 1 Tranley Mews, Fleet Road London, NW3 2DG
Website of the ranking organization:	www.topuniversities.com/about-qs
Type of organization:	commercial/for-profit



QS Global MBA Rankings

■ Methodology

The **QS Global MBA Rankings 2018** highlight the best MBA programs across the world from the 232 programs. Data was collected in early 2017, using three surveys; the QS Global Employer Survey, the QS Global Academic Survey and a survey completed by the business schools themselves. The survey completed by schools covered quantitative indicators such as the salary of graduates, class profile etc. Schools provided career progression information on their alumni using MBACSEA compliant standards. A total of 13 indicators form the basis of five key criteria that programs were ranked on:

EMPLOYABILITY (40%)

The backbone of the rankings is the QS Global Employer Survey, which asks employers from which schools they prefer to hire. Between 2012 and 2017, QS collected 158,000 responses from global employers across all sectors and industries. The total score for this indicator also considers the employment rate for students, three months post-graduation.

ENTREPRENEURSHIP AND ALUMNI OUTCOMES (15%)

The Alumni Outcomes Index looks at the schools associated with 49,000 CEOs, executives and board members at the biggest companies in the world. To do this QS considered over 150 global and regional lists including the Forbes 2000, the FT Global 500, top social media influencers, and various specialist publications. This is combined with the proportion of students from each program who have gone on to set up their own business.

To reflect a growing trend of students interested in setting up their own companies post-graduation, entrepreneurship accounts for a considerable proportion of the entrepreneurship and alumni outcomes.

RETURN ON INVESTMENT (20%)

QS used a number of data points to determine return on investment. QS looked at a 10-year return on investment, mapping average post-MBA salaries against average salaries before enrolment, taking into account forgone salary as well as tuition and cost of living. Salary increases are factored into both pre and post-MBA salary, with the latter increasing at a higher rate, as you would expect. Ranking also takes into account the percentage of graduates accepting employment within three months of finishing their studies.

THOUGHT LEADERSHIP (15%)

This indicator is based on the responses of 172,107 academics from 60 countries around the world, who elect institutions they believe are the strongest in their subject area. Research impact is also included; as per the QS World University Rankings by Subject methodology, QS measures citations per paper, rather than citations per faculty member. The percentage of faculty with a doctoral degree is also taken into account.

CLASS & FACULTY DIVERSITY (10%)

To give a clear representation of diversity with a program QS looked at the percentage of female students and faculty members (schools with an equal split receiving the highest possible score). Ranking also looked at the percentage of international faculty overall at the business school and the international mix of students on the MBA program.

Detailed description of ranking methodology:

The Economist Executive MBA Ranking

■ Information on ranking

Name of the ranking:	The Economist Executive MBA Ranking			
Geographical scope:	global			
Status of the ranking:	autonomous / independent ranking			
Website of the ranking:	www.economist.com/whichmba/executive-mba-ranking/2015			
Publication frequency:	biannual			
First year of publication:	2013 Most recent year of publication: 2015			
Type of publication:	internet			
Internet users access to ranking:	open access			
Main target groups:	employers			
	higher education institutions			
	students and parents			
Level of comparison:	study programs: 62			
Major dimensions covered:	employability			
	reputation			
	other: schools placed into bands			
Structure of presentation:	multi-indicator ranking			
	other: schools placed into bands			
Data sources:	data collected from HEIs by ranking organization			
	survey conducted exclusively by ranking organization			
Quality assurance of ranking:	periodic consultancy			
Website of the methodology:	www.economist.com/whichmba/methodology-2			

Name of the ranking organization:	The Economist Newspaper Limited
Address:	The Adelphi, 1-11 John Adam Street, London, WC2N 6HT
Website of the ranking organization:	www.economistgroup.com/
Type of organization:	commercial/for-profit



The Economist Executive MBA Ranking

Methodology

For The Economist Executive MBA Ranking data were collected using two web-based questionnaires. One questionnaire was filled out by business schools and included more quantitative measures, such as details of students and faculty, the number of overseas assignments required and statistics on alumni. The second questionnaire was circulated to current students and alumni from schools' last three graduating classes. Around 7,000 of these questionnaires were completed, and from them we gleaned the more quantitative measures, such as a rating of classmates, faculty, facilities and the like. Alumni also reported their pre-EMBA and current salaries, from which average increases could be calculated.

Programs are ranked on two criteria: personal development/educational experience and career development. Both categories are equally weighted. Within each category there are several sub-criteria and indicators, which are detailed below.

PERSONAL DEVELOPMENT AND EDUCATIONAL EXPERIENCE (50%)

Quality of students (12.5%)

Pre-MBA salary, latest graduating class; Work experience, years; Managerial work experience, years; Student rating of culture and classmates

Student diversity (12.5%)

Number of industry sectors from which students were accepted; Gender balance; Internationalism of the cohort

Quality of faculty (12.5%)

Student rating of faculty; Percentage of EMBA faculty with PhD; Ratio of faculty to EMBA students; Student rating of teaching quality

Program quality (12.5%)

Student rating of facilities; Student rating of program content; Student rating of the relevance of the program; Number of compulsory overseas assignments lasting one week or more; Student rating of the ability to keep in contact with students/faculty when off campus

CAREER DEVELOPMENT (50%)

Career progression (15%)

Rating of the extent to which the program helped alumni fulfill pre-EMBA goals; Percentage of alumni who have been promoted or grown their company since graduation

Salary (27.5%)

Percentage increase on pre-EMBA salary on graduation; Percentage increase on pre-EMBA salary after one year; Percentage increase on pre-EMBA salary after two years; Average salary of EMBA graduates, most recent graduates class

Networking (7.5%)

Number of overseas MBA alumni branches; Student rating of the helpfulness of EMBA alumni.

The Economist Full time MBA Ranking

■ Information on ranking

•			
Name of the ranking:	The Economist Full time MBA Ranking		
Geographical scope:	global		
Status of the ranking:	autonomous / independent ranking		
Website of the ranking:	www.economist.com/whichmba/full-time-mba-ranking		
Publication frequency:	biannual		
First year of publication:	2005 Most recent year of publication: 2017		
Type of publication:	internet		
Internet users access to ranking:	open access		
Main target groups:	employers		
	higher education institutions		
	policymakers, governments and funding agencies students and parents		
Level of comparison:	study programs: 100		
Major dimensions covered:	employability		
	reputation		
	teaching		
Structure of presentation:	standard presentation (league tables)		
Data sources:	survey conducted exclusively by ranking organization		
Quality assurance of ranking:	periodic consultancy		
Website of the methodology:	www.economist.com/whichmba/methodology-2017		

Name of the ranking organization:	The Economist Newspaper Limited
Address:	The Adelphi, 1-11 John Adam Street, London, WC2N 6HT
Website of the ranking organization:	www.economistgroup.com/
Type of organization:	commercial/for-profit



The Economist Full time MBA Ranking

■ Methodology

Data for **The Economist Full-time MBA Ranking** were collected during spring 2016, using two surveys. The first is completed by schools with eligible programmes and covers quantitative matters such as the salary of graduates, the average GMAT scores of students and the number of registered alumni. This accounts for around 80% of the ranking. The remaining 20% comes from a qualitative survey filled out by current MBA students and a school's most recent graduating MBA class.

OPEN NEW CAREER OPPORTUNITIES (35%)

Diversity of recruiters - Spread of industry sectors that recruited most recent graduates, Placement success - Percentage of job-seeking students with a job offer three months after graduation

Careers services - Percentage job-seeking students who found a job directly through the careers service Student assessment of careers services - Did the careers service meet your expectations and needs?

PERSONAL DEVELOPMENT / EDUCATIONAL EXPERIENCE (35%)

Faculty quality - Ratio of faculty/students; Percentage of full-time faculty with a PhD; Faculty rating by students Student quality - Average GMAT score; Average number of years of work experience; Average salary of students before entering class

Student diversity - Spread of regions from which students hailed; Gender diversity; Student rating of culture and classmates Educational experience - Student rating of program and range of electives; Range of and access to overseas study programs; Number of language courses available; Student assessment of facilities and other services

INCREASE IN SALARY (20%)

Post-MBA salary, excluding bonuses; Salary change from pre-MBA to post-MBA, excluding bonuses

POTENTIAL TO NETWORK (10%)

Ratio of MBA alumni to current full-time MBA students; Number of overseas alumni chapters; Student rating of alumni network.

IREG Inventory of International University Rankings

NATIONAL HIGHER EDUCATION SYSTEM RANKINGS

QS Higher Education System Strength Rankings U21 Ranking of National Higher Education Systems

QS Higher Education System Strength Rankings

■ Information on ranking

Name of the ranking:	QS Higher Education System Strength Rankings	
Geographical scope:	global	
Status of the ranking:	autonomous / independent ranking	
Name of person in charge of ranking:	Ben Sowter	
E-mail of person in charge of ranking:	ben@qs.com	
Website of the ranking:	www.topuniversities	c.com/system-strength-rankings/2016
Publication frequency:	annual	
First year of publication:	2016	Most recent year of publication: 2016
Type of publication:	internet	
Internet users access to ranking:	open access	
Main target groups:	higher education institutions	
	policymakers, governments and funding agencies	
Level of comparison:	other: countries	
Major dimensions covered:	employability	internationalization
	reputation	research
	teaching	
Structure of presentation:	standard presentation (league tables)	
Data sources:	other: QS World University Rankings, GDP official statistics	
Quality assurance of ranking:	advisory board	
	periodic consultancy	
Website of the methodology:	www.topuniversities.	com/system-strength-rankings/methodology

■ Information on ranking organization

Name of the ranking organization:	Quacquarelli Symonds Ltd (QS)
Address:	London Main Office, 1 Tranley Mews, Fleet Road London, NW3 2DG
Website of the ranking organization:	www.topuniversities.com/about-qs
Type of organization:	commercial/for-profit



QS Higher Education System Strength Rankings

Methodology

The **QS Higher Education System Strength Rankings** highlights the nations with the world's strongest higher education systems. Comparing national performance in four areas, the ranking is based on system strength, access, flagship institution performance, and economic context. These four categories are outlined below.

SYSTEM STRENGTH (25%)

The first category assesses overall national system strength, based on performance in the international rankings. Each country is awarded a score based on the number of its institutions which are ranked 700 or above in the QS World University Rankings®, divided by the average position of those institutions. The aim is to give an overall indication of each country's standing in the global ranking tables.

ACCESS (25%)

The second category relates to access, a key issue today as nations aspire to extend access to world-class higher education. Scores in this category are calculated based on the number of places available at universities ranked within the global top 500, divided by an indicator of population size. The specific figures used in this calculation are the total number of full-time equivalent students at universities in the top 500 of the QS World University Rankings, divided by the square root of the population. The aim is to give an indication of the chances of gaining a place at a world-class university for residents of the country in question.

FLAGSHIP INSTITUTION (25%)

Next up, the 'flagship' category assesses the performance of the country's leading institution within the global rankings. This is a normalized score, based on the place each nation's top university occupies in the QS World University Rankings. This indicator is based on the premise that the performance of a country's leading institution is a credit to the overall system, often resulting from national investment in developing a flagship institution to lead the way.

ECONOMIC CONTEXT (25%)

The fourth and final indicator aims to assess the impact of national investment in higher education, by comparing each nation's financial situation to its performance in the international rankings. An indexed score is awarded for each university featured in the rankings (7 points for a university in the top 100, 6 points for 101-200, 5 points for 201-300, 4 for 301-400, 3 for 401-500, 2 for 501-600 and 1 for 601-700), and this is then factored against the GDP per capita for the country in question.

U21 Ranking of National HE Systems

■ Information on ranking

Name of the ranking:	U21 Ranking of National Higher Education Systems		
Geographical scope:	global		
Status of the ranking:	autonomous / independent ranking		
Name of person in charge of ranking:	Ross Williams		
E-mail of person in charge of ranking:	rossaw@unimelb.edu.au		
Website of the ranking:	www.universitas21.com/article/projects/details/152/		
	u21-ranking-of-national-higher-education-systems-2017		
Publication frequency:	annual		
First year of publication:	2012	Most recent year of publication: 2017	
Type of publication:	internet		
	print - special publication: U21 Ranking of National Higher Education Systems 2017		
Internet users access to ranking:	open access		
Main target groups:	higher education institutions		
	policymakers, governments and funding agencies		
Level of comparison:	other: countries	other: countries	
Major dimensions covered:	employability	innovation	
	internationalization	knowledge transfer	
	reputation	research	
	teaching	web presence	
	other: gender balance		
Structure of presentation:	multi-indicator ranking		
	standard presentation (league tables)		
Data sources:	third-party database (data not provided by HEI)		
	other: official governmental statistics		
Quality assurance of ranking:	advisory board	periodic consultancy	
Website of the methodology:	www.universitas21.c	om/article/projects/details/153/	
	executive-summary-a	and-full-2017-report	

■ Information on ranking organization

Name of the ranking organization:	Melbourne Institute of Applied Economic and Social Research
	and Social Research, University of Melbourne
Address:	Level 5, Faculty Of Business And Economics Building 111 Barry Street,
	Melbourne VIC 3010, Australia
Website of the ranking organization:	http://melbourneinstitute.unimelb.edu.au/
Type of organization:	university/higher education institution



U21 Ranking of National HE Systems

Methodology

The Universitas 21 Ranking assess national higher education systems and use 25 measures of performance.

RESOURCES (20%)

- R1. Government expenditure on tertiary education institutions as a percentage of GDP. (5%)
- R2. Total expenditure on tertiary education institutions as a percentage of GDP. (5%)
- R3. Annual expenditure per student by tertiary education institutions in USD purchasing power parity. (5%)
- R4. Expenditure in tertiary education institutions for research and development as a percentage of GDP. (2.5%)
- R5. Expenditure in tertiary education institutions for research and development. (2.5%)

ENVIRONMENT (20%)

- E1. Proportion of female students in tertiary education. (1%)
- E2. Proportion of female academic staff in tertiary institutions. (2%)
- E3. A rating for data quality. (2%)
- E4. Qualitative measure of the policy environment comprising the diversity of the system and the results of two surveys on the policy environment and the financial autonomy of public universities. (10%)
- E5. Responses to WEF survey question (7-point scale): "How well does the educational system in your country meet the needs of a competitive economy?". (5%)

CONNECTIVITY (20%)

- C1. Proportion of international students in tertiary education. (4%)
- C2. Proportion of articles co-authored with international collaborators. (4%)
- C3. Webometrics Web TRANSPARENCY measure. (2%)
- C4. Webometrics VISIBILITY index: sum of data for 10,000 tertiary institutions divided by country's population. (2%)
- C5. Responses to question 'Knowledge transfer is highly developed between companies and universities', asked of business executives in the annual survey by IMD World Development Centre. (4%)
- C6. Percentage of university research publications that are co-authored with industry researchers. (4%)

OUTPUT 40%

- O1. Total articles produced by higher education institutions. (10%)
- O2. Total articles produced by higher education institutions per head of population. (3%)
- O3. Average impact of articles as measured by citations in 2014 to articles published in previous years using the Karolinska Institute normalized impact factor. (5%)
- O4. The depth of world-class universities in a country according to the Shanghai Jiao Tong scores, divided by country population. (3%)
- O5. The excellence of a nation's best universities calculated by totalling the 2016 Shanghai Jiao Tong scores for the nation's three best universities. (7 %)
- O6. Enrolments in tertiary education. (3%)
- O7. Percentage of the population aged 25-64 with a tertiary qualification. (3%)
- O8. Number of researchers (full-time equivalent) in the nation per million of population. (3%)
- O9. Unemployment rates among tertiary educated aged 25-64 years. (3%)

Detailed description of ranking methodology:

Questionnaire on International Rankings

Invitation

Considering the importance and growing role of international university rankings, IREG Observatory on Academic Rankings and Excellence plans to prepare and publish "IREG Inventory on International Rankings (Global and Regional)" on the IREG Observatory website and present it at international conferences.

The Perspektywy Education Foundation has been trusted with the task of preparing the Inventory as it has several years of experience in preparing and analyzing academic rankings. Perspektywy was responsible for preparing and publishing the "IREG Inventory of National University Rankings"

General assumption of the "IREG Inventory on International Rankings:

- · Only those rankings with the latest edition published on or after 2014 will be included.
- · In general, only rankings that have been published twice will be considered.
- · Regional sub-rankings extracted directly from the global rankings will not be included.
- The principles listed in the "IREG Guidelines for Stakeholders of Academic Rankings" will be used as a reference in interpreting the scope and specifics of ranking.

A. Information on ranking

Geographical scope O global O regional (please indicate region):	
Status of the ranking: O autonomous / independent ranking O related to (name of the "parent" rank	sina):
Name of ranking: (in English)	King)
Name of ranking: (in original language)	
Name of person in charge of ranking:	
E-mail of person in charge of ranking:	
Website of ranking:	
Frequency of publication:	
☐ biannual	
☐ semiannual☐ other (please indicate):	

First year of publication:	
Most recent year of publication:	
Type of publication: (multiple answers possible)	
internet	
☐ mobile application	
☐ print - magazine, newspaper(please indicate the title):_	
□ print - special publication(please indicate the title):	
Internet users access to ranking:	
O fee required	
O free registration	
O open access	
Languages of publication:	
1	
2	
3	
<u> </u>	
Main target groups: (multiply choices allowed)	
□ employers	
☐ higher education institutions	
$\hfill\Box$ policymakers, governments and funding agencies	
$\hfill\Box$ quality assurance, accreditation, and recognition organi	zations
☐ students and parents	
□ other (please indicate):	
Level of comparison: (multiple answers possible)	
☐ broad fields(e.g. humanities - please indicate the number	er of broad fields ranked):
☐ fields or subject(e.g. history - please indicate the number	,
☐ institutional(university - please indicate the number of in	
☐ study programs(please indicate the number of study pro	,
□ other (please indicate):	
Major dimensions covered: (multiple answers possible)	
□ employability□ innovation	
☐ internationalization	
☐ knowledge transfer	
☐ regional engagement	
☐ regional engagement	
□ research	
☐ social engagement	
☐ teaching	
□ web presence	
☐ other (please indicate):	

Structure of presentation: (multiple answers possible) multi-indicator ranking standard presentation (league tables) other (please indicate):
Data sources: (multiple answers possible) □ data collected from HEIs by ranking organization(please indicate in what way the data are validated):
data collected from HEIs by third-party agency(please indicate the name of agency):
□ survey conducted exclusively by ranking organization □ survey of HEIs staff or students by ranking organization in collaboration with a HEI □ third-party database (data not provided by HEI)(please indicate the name of database and data provider):
other (please indicate):
Quality assurance of ranking: (multiple answers possible) advisory board certification (e.g. IREG Audit) periodic consultancy other (please indicate): Short description of ranking methodology: (up to 3000 characters)
one reconstruction of the reconstruction of
Website with detailed description of ranking methodology

116 Notes



IREG Guidelines for Stakeholders of Academic Rankings

The Guidelines are intended to give users of rankings a trustworthy tool and provide recommendations for interpretation, use and application of rankings by interested parties such as students, parents, universities, media, employers and policy makers.

IREG Inventory of National Rankings

National university rankings play increasing role as a barometer of quality of higher education institutions. The purpose of the Inventory is to collect and make available information on the current state and scope of this important group of rankings.

IREG List of International Academic Awards

Awards serve as a significant driving force for scientific advances and competition. The IREG List is a catalogue of academic awards with highest international prestige and significance.

IREG Ranking Audit

iREG IREG Ranking Audit, conducted by independent experts, verifies if a ranking is done professionally, has transparent methodology and responds to the needs of stakeholders: students, higher education institutions, employers and policy makers.

www.ireg-observatory.org

The "IREG Inventory of International University Rankings" was prepared by the Perspektywy Education Foundation at the request of the IREG Observatory on Academic Ranking and Excellence whose aim is the improvement of the quality of academic rankings and quality of higher education.



