

**SUBJECT RANKINGS 2023**

Please note that this 2nd Fact File refers to the final authorized results. The preliminary Fact File received on 21st February was indicative. Please ensure you are using this version to understand and communicate your results.



# WELCOME TO THE 2023 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

Welcome to your institution's fact file for the QS World University Rankings by Subject 2023.

This file provides the results for your institution in the subjects and broad subject areas where you have been nominated for evaluation in our academic reputation survey, as well as the scores and ranks for those subjects where you made it into the published rankings table. It should also provide you with useful information for any media communication you might need to prepare prior to launch.

To produce the rankings for this year the team analysed over 16.4 million unique papers published between 2016-2020, producing close to 117.8 million citations in 2016-2021. 1594 institutions ranked across 54 subjects in 5 broad subject areas, creating over 18,300 ranked entries. These figures reflect some of the scale behind this huge undertaking that the team carries out in order to produce these subject rankings.

The table on page 4 shows a summary of your scores in broad subject areas you have been analysed in, as well as ranks in the broad subject areas you are to be published in. The following two pages (5 and 6) show a summary of your scores and ranks in narrow subject areas. Lastly the table on page 7 shows you your results in the subject rankings for the last three years so you can track your progress.

In the Appendix you will find an explanation of the weightings that make up the different subject tables, the evolution of the subject rankings exercise, the paper thresholds that we have used in this edition and an indication of the number of institutions analysed and ranked.

We hope you will find this useful.

Rankings Team,

QS Institutional Performance Unit

# 2023 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

## UNIVERSIDADE DE SÃO PAULO

Brazil

49

68=

51=

52

45=

These are the ranks achieved by the institution in the QS Rankings by Broad Subject Area.

Arts & Humanities

Engineering & Technology

Life Sciences & Medicine

Natural Sciences

Social Sciences & Management



### OVERALL SCORES BY BROAD SUBJECT AREA



In 2023, Universidade de São Paulo has been ranked in **5** out of 5 broad subject areas.

**Social Sciences & Management** is the institution's strongest field at rank **45=** with an overall score of **78.0**.

## 2023 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

This page shows the institution's detailed performance by indicator and overall score across all broad subject areas that you have been nominated for in our academic reputation survey. The following two pages also show the institution's detailed performance by indicator across all narrow subject areas. It is very unusual for an institution to be analysed in all 54 narrow subjects and 5 broad subject areas.

There are different reasons why an institution may not have results in any given subject.

1. It may not offer a program. Receiving a score for a particular subject does not guarantee that we have checked for its presence in your institution. These checks are only carried out for institutions with a score high enough to receive a published rank in the subject.
2. It may not have published a sufficient number of papers.
3. It may not have attracted a minimum level of recognition through our surveys.

If you have a displayed score in reputation and research indicators then you met the minimum threshold for consideration. In this case, the only reason you are not ranked is that your score is not high enough to receive a published rank.

### Broad Subject Area Scores and Ranks

	Global Rank	Domestic Rank	Academic	Employer	Citations	H-index	IRN	Score
Arts & Humanities	49	1	83.4	81.4	63.5	58.0	32.00	77.0
Engineering & Technology	68=	1	76.6	80.7	76.6	75.1	78.00	77.8
Life Sciences & Medicine	51=	1	81.7	80.7	73.2	69.9	86.00	78.0
Natural Sciences	52	1	78.0	80.0	79.6	80.7	84.00	79.6
Social Sciences & Management	45=	1	78.2	82.4	72.1	63.9	80.00	78.0

# 2023 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

## Narrow Subject Area Scores and Ranks

		Global Rank	Domestic Rank	Academic	Employer	Citations	H-index	IRN	Score
Arts & Humanities	Archaeology								
	Architecture / Built Environment	44=	1	70.3	80.3	82.3	76.0		73.1
	Art & Design	51-100	1	56.3	83.7				59.0
	Classics & Ancient History			48.3	65.2				50.0
	English Language & Literature	151-200	1	62.7	73.8	58.3			63.4
	History	51-100	1	77.0	72.4	70.3	76.1		75.4
	History of Art (NEW)			70.3	84.0				71.7
	Linguistics	151-200	1=	61.5	78.0	59.7	60.1		63.0
	Modern Languages	41=	1	81.8	77.1				80.4
	Performing Arts			52.1	68.8				55.4
	Philosophy	101-150	1=	60.9	73.2	61.1	61.2		61.6
Theology, Divinity & Religious Studies									
Engineering & Technology	Computer Science & Information Systems	86=	1	60.4	80.2	71.0	71.3	61.1	69.1
	Data Science and Artificial Intelligence (NEW)			57.6	73.1	70.7	72.8		66.5
	Engineering - Chemical	84=	2	68.2	79.7	79.0	76.5	62.9	73.8
	Engineering - Civil & Structural	45=	1	73.2	84.4	83.7	75.1		78.4
	Engineering - Electrical & Electronic	80=	1	66.2	78.5	79.6	75.0	61.3	72.4
	Engineering - Mechanical, Aeronautical & Manufacturing	76=	1	70.7	79.0	78.8	77.2	67.8	74.9
	Engineering - Mineral & Mining	30	1	50.2	80.6	82.7	84.7		69.4
	Petroleum Engineering	24=	1=	67.2	73.5	81.1	82.3		73.4

# 2023 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

## Narrow Subject Area Scores and Ranks (continued)

		Global Rank	Domestic Rank	Academic	Employer	Citations	H-index	IRN	Score
Life Sciences & Medicine	Agriculture & Forestry	28	1	67.1	82.3	80.8	93.5	78.10	75.7
	Anatomy & Physiology	51-100	1	68.1	75.3	78.1	87.1		76.1
	Biological Sciences	61	1	74.5	78.5	74.2	78.4	75.80	75.8
	Dentistry	14	1	64.1	67.2	77.1	86.2		74.9
	Medicine	64	1	70.1	76.2	81.1	84.7	79.20	76.7
	Nursing	36	1	75.6	77.6	85.6	90.8		83.4
	Pharmacy & Pharmacology	56=	1	69.8	79.7	85.9	90.7	51.70	76.4
	Psychology	101-150	1	68.5	80.6	67.1	73.1	49.70	69.5
	Veterinary Science	42	1	71.2	88.4	78.4	81.7		78.2
Natural Sciences	Chemistry	90=	1	72.7	79.5	75.7	73.3	71.10	74.4
	Earth & Marine Sciences	51-100	1	73.9	79.8	84.6	87.5	69.50	78.9
	Environmental Sciences	54	1	82.8	78.3	84.6	84.7	69.50	82.5
	Geography	51-100	1	79.5	77.9	79.4	77.3		79.0
	Geology	51-100	1	71.2	81.4	85.1	85.7	67.00	78.9
	Geophysics	51-100	1	71.2	81.2	85.4	84.6	63.50	78.3
	Materials Science	101-150	1=	64.5	80.0	72.7	74.2	67.10	69.9
	Mathematics	83	1	71.7	74.8	71.7	75.3	72.10	72.9
	Physics & Astronomy	82	1	72.4	76.0	81.2	82.8	73.30	76.1
Social Sciences & Management	Accounting & Finance	92=	1	70.3	77.3	62.3	59.5		70.5
	Anthropology	27=	1	85.7	77.4	67.9	67.8		81.3
	Business & Management Studies	82=	1	67.5	76.4	67.4	87.5		72.2
	Communication & Media Studies	101-150	1	77.3	81.6	64.1	63.3		72.3
	Development Studies								
	Economics & Econometrics	141=	2	63.6	76.6	64.8	62.7		66.3
	Education	97=	1	72.1	79.3	69.1	74.2		72.6
	Hospitality & Leisure Management	51-100	1	52.9	45.6	51.4			49.2
	Law	47=	1	76.1	79.6	74.1	63.6		75.2
	Library & Information Management	51-70	1	56.5	91.0	83.7	77.6		65.1
	Marketing (NEW)			67.4	84.4	59.2	64.0		71.3
	Politics & International Studies	51-100	1	72.3	78.1	74.9	69.8		74.1
	Social Policy & Administration								
	Sociology	44	1	81.1	74.6	61.6	63.9		76.9
	Sports-related Subjects	51-100	1	70.2	73.7	85.9	87.2		75.5
Statistics & Operational Research	51-100	1	73.9	81.3	76.7	85.3		77.5	

## 2023 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

The tables below present the rank evolution in each subject and broad subject area where you have been nominated for evaluation.

### Broad Subjects

	2021	2022	2023
Life Sciences & Medicine	74=	61	51=
Arts & Humanities	57	68=	49
Engineering & Technology	86=	96=	68=
Natural Sciences	75	77	52
Social Sciences & Management	52=	74=	45=

### Narrow Subjects

	2021	2022	2023	
<b>Arts &amp; Humanities</b>	Archaeology			
	Architecture / Built Environment	48=	44	44=
	Art & Design	51-100	51-100	51-100
	Classics & Ancient History			
	English Language & Literature	151-200	151-200	151-200
	History	51-100	51-100	51-100
	History of Art (NEW)			
	Linguistics	151-200	151-200	151-200
	Modern Languages	47	41=	41=
	Performing Arts			
	Philosophy	151-200	151-200	101-150
	Theology, Divinity & Religious Studies			
<b>Engineering &amp; Technology</b>	Computer Science & Information Systems	79=	89=	86=
	Data Science and Artificial Intelligence (NEW)			
	Engineering - Chemical	73	81=	84=
	Engineering - Civil & Structural	39=	51-100	45=
	Engineering - Electrical & Electronic	102=	95	80=
	Engineering - Mechanical, Aeronautical & Manufactu..	61	70=	76=
	Engineering - Mineral & Mining	34	31	30
	Petroleum Engineering	29	32	24=
<b>Life Sciences &amp; Medicine</b>	Agriculture & Forestry	46=	48=	28
	Anatomy & Physiology	51-100	51-100	51-100
	Biological Sciences	106=	93=	61
	Dentistry	13	15	14
	Medicine	85=	77	64
	Nursing	51-100	51-100	36
	Pharmacy & Pharmacology	65	63	56=
	Psychology	101-150	101-150	101-150
	Veterinary Science	40=	41	42

### Narrow Subjects (continued)

	2021	2022	2023	
<b>Natural Sciences</b>	Chemistry	108	92=	90=
	Earth & Marine Sciences	51-100	51-100	51-100
	Environmental Sciences	71=	66=	54
	Geography	46	38	51-100
	Geology	51-100	51-100	51-100
	Geophysics	51-100	51-100	51-100
	Materials Science	101-150	101-150	101-150
	Mathematics	96=	95	83
	Physics & Astronomy	90=	87=	82
	<b>Social Sciences &amp; Management</b>	Accounting & Finance	101-150	92=
Anthropology		44=	42=	27=
Business & Management Studies		90=	97=	82=
Communication & Media Studies		101-150	101-150	101-150
Development Studies				
Economics & Econometrics		123=	137=	141=
Education		101-150	101-150	97=
Hospitality & Leisure Management		37=	51-100	51-100
Law		46=	51=	47=
Library & Information Management				51-70
Marketing (NEW)				
Politics & International Studies		50	51-100	51-100
Social Policy & Administration				
Sociology		63=	49=	44
Sports-related Subjects		51-100	49=	51-100
Statistics & Operational Research	51-100	51-100	51-100	

# Supporting your ambitions to strengthen your university's reputation

Whatever your institution's strategic objectives for improving performance and reputation, we can tailor our data-driven expertise and services to drive your vision forward.

For over 30 years, QS has been the established partner of choice for higher education institutions across the world. We are passionate about drawing on our collective experience to enable and accelerate your ambitions.

We offer a suite of tiered packages which draw from the wealth and breadth of QS products and services to achieve these core goals:



Accelerate and build your international strategy	
How we'll help	QS solution
Manage your partnerships	Let us streamline your international partnerships and mobility management through our SaaS platform: <b>QS MoveON</b> .
Engage with new partners	Our detailed rating system, <b>QS Stars</b> , allows you to showcase your institution's strengths. Access a wealth of opportunities through Silver sponsorship of two <b>QS Higher Education Summits</b> .
Analyse your institution's reputation	Access one of our interactive insights dashboards: <b>QS Academic Reputation Tracker</b> or <b>QS Student Insights Tracker</b> .
Learn from experts	Receive delegate passes to learn best practice from other institutions and our experts at one of our <b>QS Stars</b> and <b>Analytics user community events</b> .
Reach new prospects	Feature in our monthly publication <b>QS Insights magazine</b> , or upgrade to a <b>QS Advanced Profile on TopUniversities.com</b> .
Refine and plan your strategy	Access <b>bespoke advice</b> from our team of higher education consultants on how to leverage insights to develop and launch an impactful internationalisation strategy.



## Manage and amplify your reputation

How we'll help	QS solution
<b>Analyse</b> your institution's reputation	Access our interactive insights dashboards: <b>QS Academic Reputation Tracker</b> and <b>QS Employer Reputation Tracker</b> .
<b>Reach</b> new audiences	Feature in our monthly QS Insights magazine and upgrade to a QS Advanced Profile on <b>TopUniversities.com</b> or <b>QS China</b> .
<b>Engage</b> with new partners	Our detailed rating system, <b>QS Stars</b> , allows you to showcase your institution's strengths. Access a wealth of promotional opportunities through Silver sponsorship of two <b>QS Higher Education Summits</b> .
<b>Manage</b> your reputation	Effectively manage your contacts using our SaaS-based reputation management system: <b>QS MoveIN</b> .

## Evaluate your performance and develop a strategy

How we'll help	QS solution
<b>Analyse</b> your institution's performance	Access our full range of interactive insights dashboards including the <b>QS World University Rankings Tracker</b> , <b>QS Employer Reputation Tracker</b> and <b>QS Analytics: Sustainability</b> .
<b>Evaluate</b> your strengths	Our detailed rating system, <b>QS Stars</b> , allows you to showcase your institution's strengths.
<b>Learn</b> from experts	Receive delegate passes to our <b>QS Stars</b> and <b>Analytics user community events</b> , as well as a <b>QS Higher Education Summit</b> .
<b>Manage</b> your reputation	Effectively manage your contacts using our SaaS-based reputation management system: <b>QS MoveIN</b> .
<b>Refine</b> and plan your strategy	Access <b>bespoke advice</b> from our expert team of consultants to develop and deliver an impactful performance strategy.

Contact us today to discuss which option will accelerate your institutional performance ambitions:  
[insights.qs.com/product-packages](https://insights.qs.com/product-packages)

**APPENDICES**



**DEFINITIONS,  
WEIGHTINGS,  
THRESHOLDS,  
AND HEADLINE  
FIGURES**



# 2023 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

## METHODOLOGY: DEFINITIONS

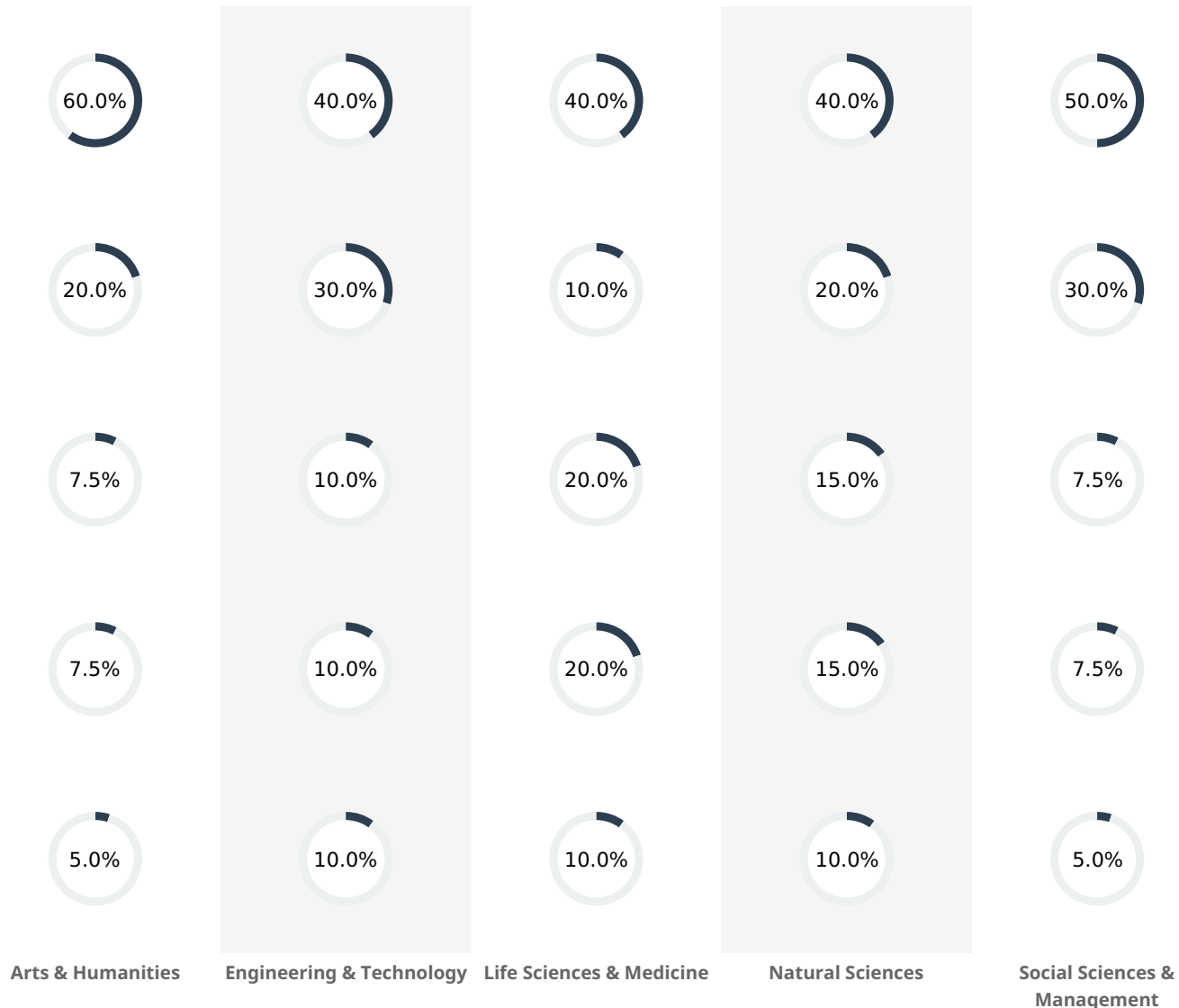
**ACADEMIC REPUTATION** Between 2018 and 2022 QS has collected votes from over 151,000 academics around the world. Each academic counted has given their opinion on universities in their fields of expertise.

**EMPLOYER REPUTATION** The employability metric is based on employer reputation. The voice of over 99,000 global employers have been taken into account between 2018 and 2022 giving us a large pool of information in terms of hiring levels.

**CITATIONS PER PAPER** 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.

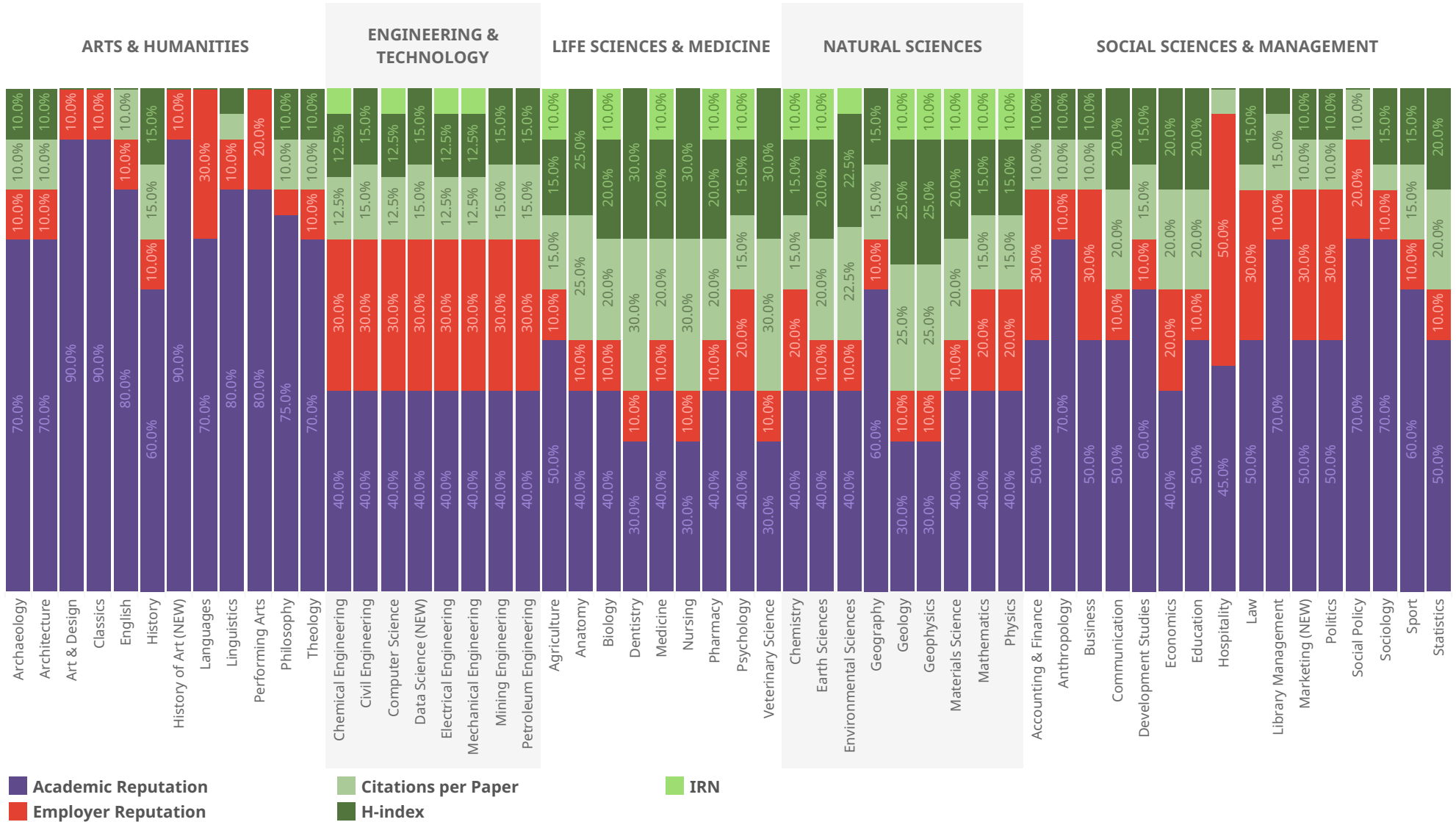
**H-INDEX** The h-index is an index that attempts to measure the stability of impact and quality of the work published by the institutions' scientists and scholars.

**IRN** International Research Network (IRN) is a measure of efficiency of establishing stable research collaborations in every of our 5 broad subject areas.



# 2023 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

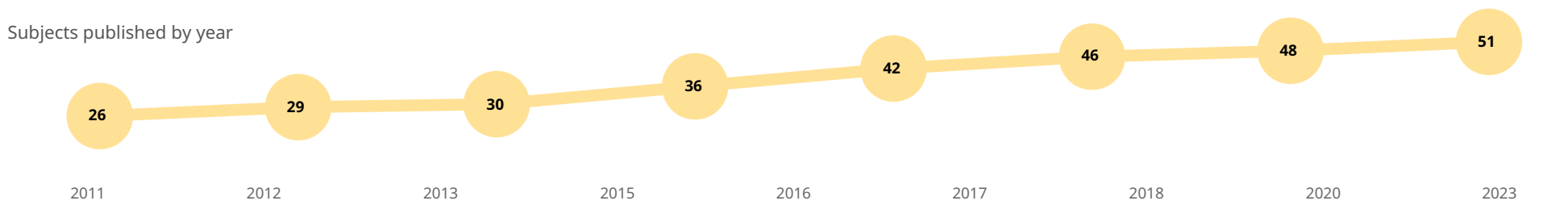
We use a variable approach to the weightings for the different subjects. The chart below provides details of the combinations used in the 2023 edition of the rankings.



# 2023 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

The **QS World University Rankings® by Subject** ranks the world's top universities in individual subject areas, covering 54 disciplines as of 2023. A list of the considered subjects, grouped by the year of first release, is presented below.

Subjects published by year



2011	2012	2013	2015	2016	2017	2018	2020	2023
Accounting & Finance Biology Chemical Engineering Chemistry Civil Engineering Computer Science Earth Sciences Economics Electrical Engineering English Environmental Sciences Geography History Languages Law Linguistics Materials Science Mathematics Mechanical Engineering Medicine Philosophy Physics Politics Psychology Sociology Statistics	Communication Education Pharmacy	Agriculture	Architecture Art & Design Business Dentistry Development Studies Veterinary Science	Anthropology Archaeology Mining Engineering Nursing Performing Arts Social Policy	Anatomy Hospitality Sport Theology	Classics Library Management	Geology Geophysics Petroleum Engineering	Data Science History of Art Marketing

PUBLISHED INSTITUTIONS BY LOCATION

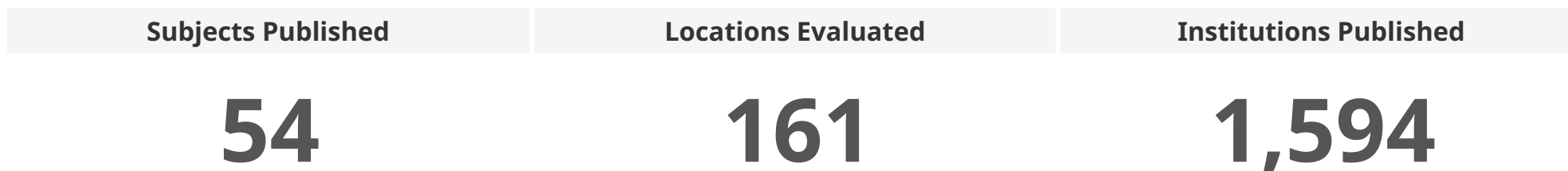


TOP 10 LOCATIONS BY NUMBER OF RANKED INSTITUTIONS

<b>United States</b>	221
<b>United Kingdom</b>	106
<b>China (Mainland)</b>	98
<b>France</b>	73
<b>India</b>	67
<b>Germany</b>	60
<b>Italy</b>	56
<b>Russia</b>	55
<b>Japan</b>	51
<b>Australia</b>	39

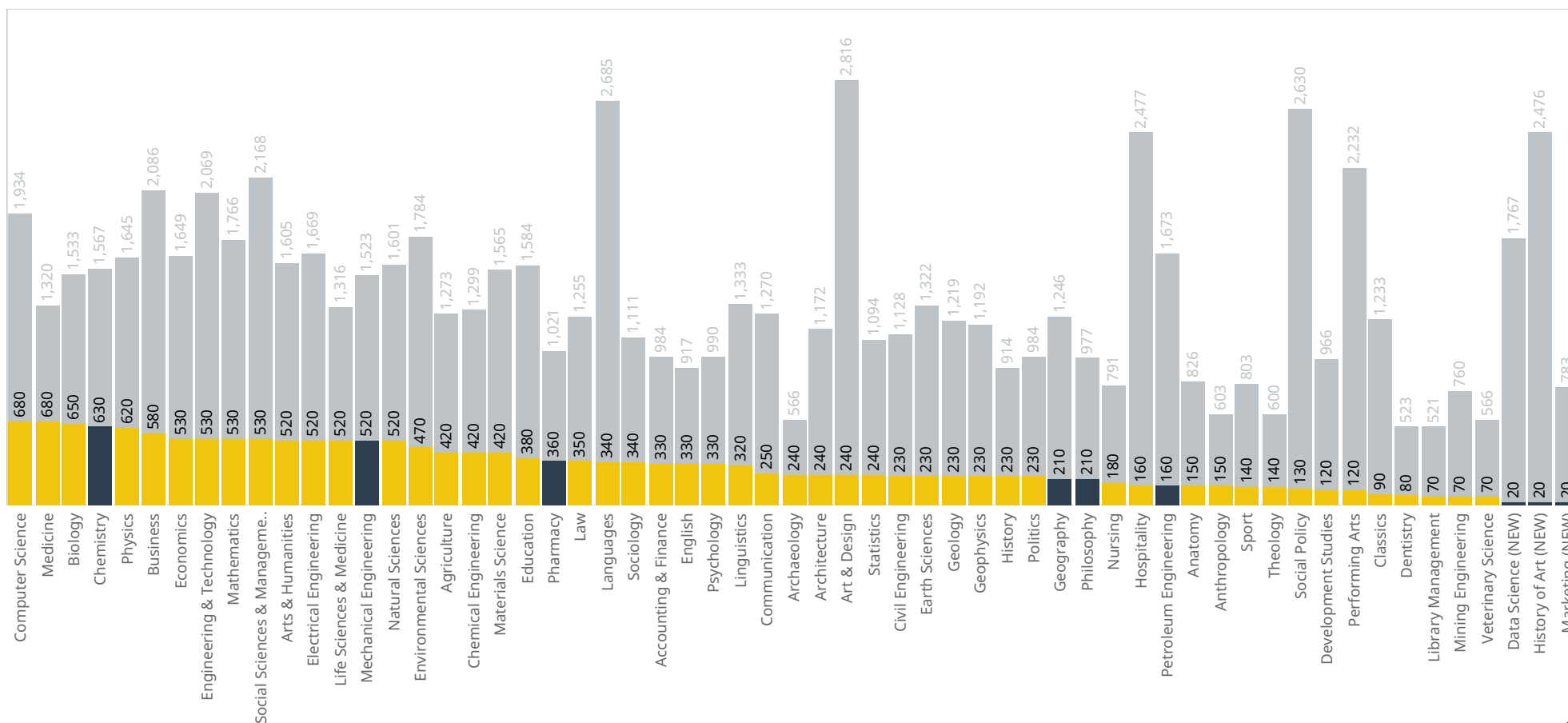
# 2023 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

The charts below present the number of institutions evaluated and ranked in each of the relevant subject areas.



## INSTITUTIONS ANALYSED AND PUBLISHED BY SUBJECT - YEAR 2023

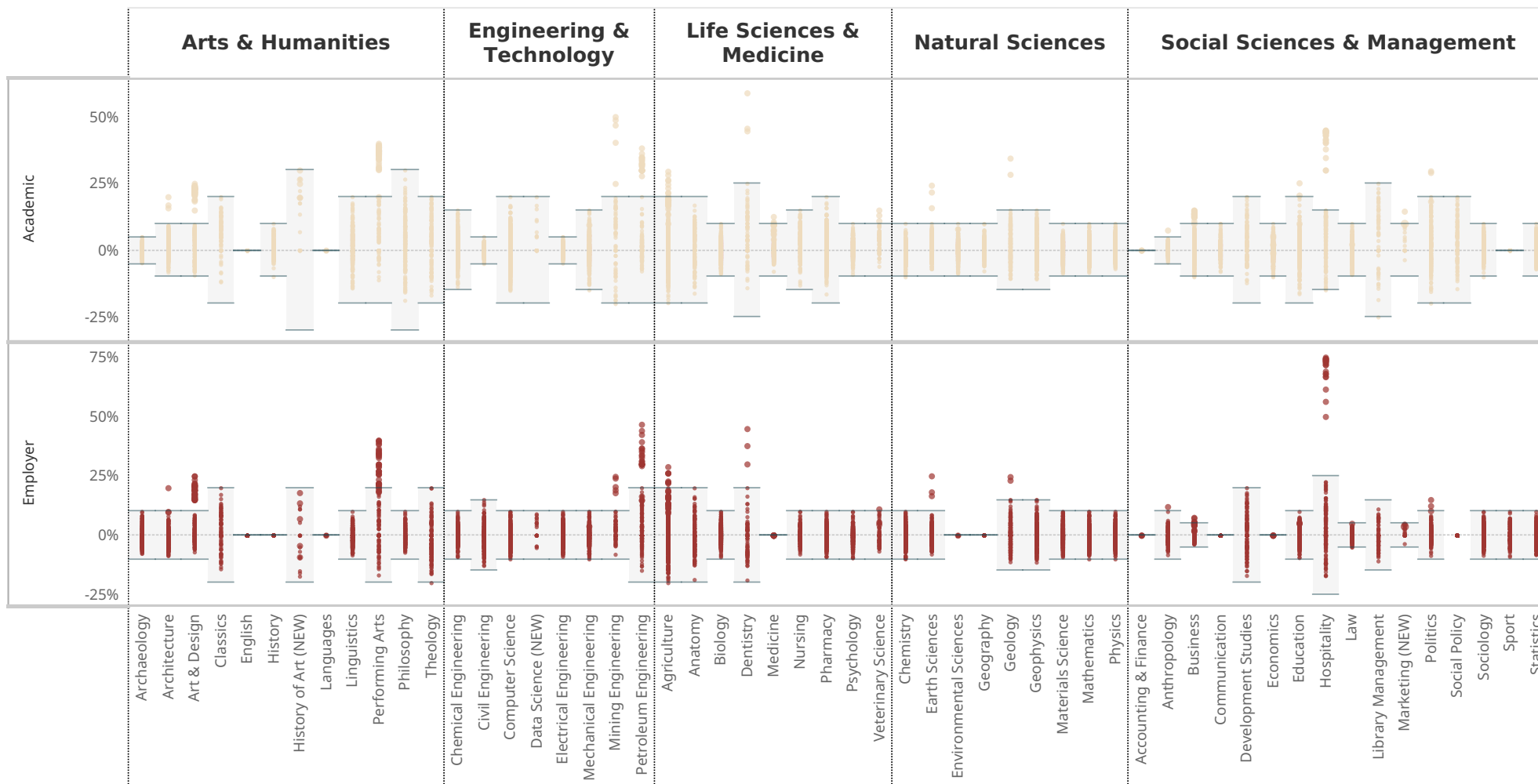
Subjects with **highlight color** have extended publishing ranges.



# 2023 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

In the QS Subject Rankings methodology, a specialization adjustment is applied to the original reputation scores in order to boost the performance of those institutions that present a stronger focus in specific subjects. The original reputation rank calculated for each subject is compared against the reputation rank obtained in the relevant broad subject area containing the said subject according to the QS mapping. For example, the reputation results in Biology are compared against the overall reputation rank in Life Sciences & Medicine. Whenever the reputation rank difference between the subject and the broad area exceeds an acceptable number of places, a positive or negative adjustment is applied in the reputation score. The method compares the proportional difference for each institution against the maximum and minimum recorded globally.

DISTRIBUTION OF SPECIALIST ADJUSTMENTS - REPUTATION



## 2023 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

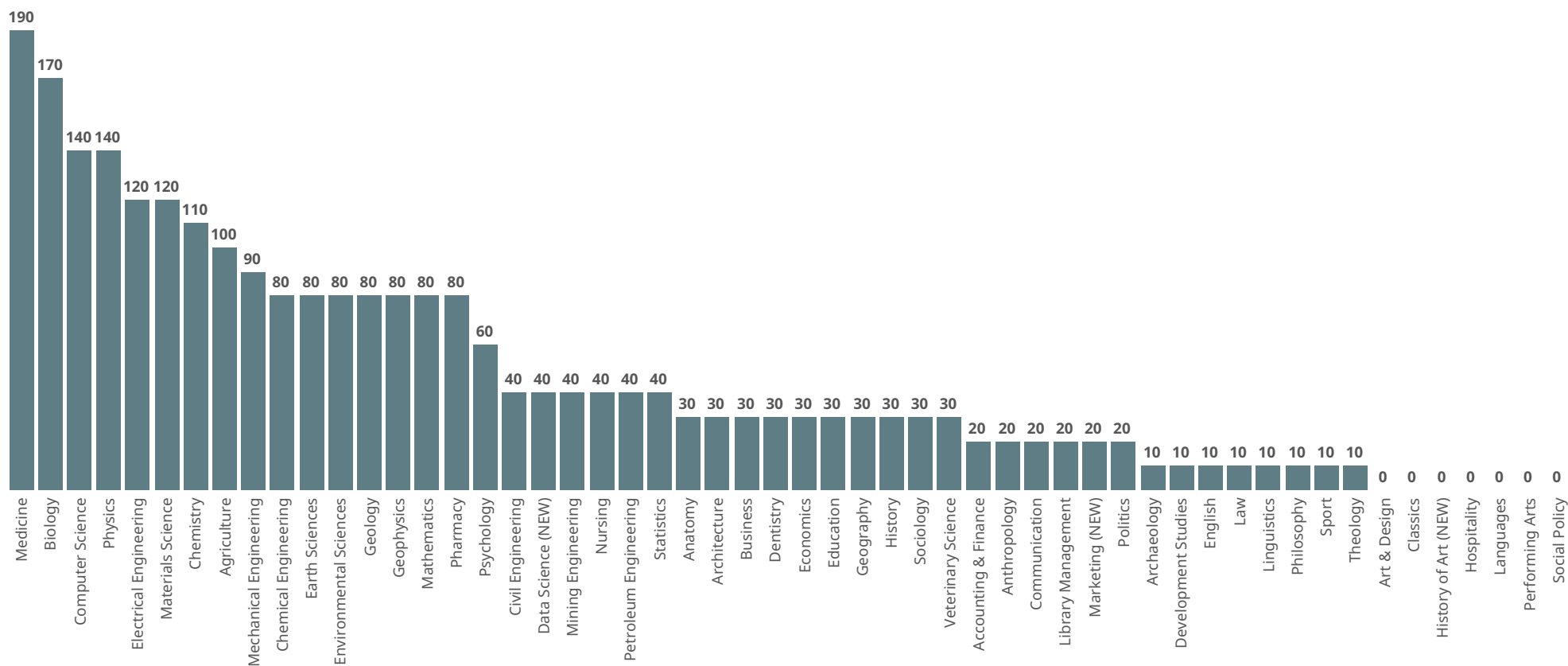
In order to feature in any discipline table, an institution must meet three simple prerequisites:

- Offer undergraduate or taught postgraduate programmes in the given discipline
- Exceed the minimum required score for the academic and/or employer reputation indicators
- Exceed the five-year threshold for number of papers published and indexed by Scopus in the given discipline

The following chart discloses the minimum number of papers required to be considered in the latest edition of the rankings by subject.

PAPER THRESHOLD BY SUBJECT - YEAR 2023

MINIMUM NUMBER OF PUBLICATIONS INDEXED BY SCOPUS REQUIRED TO BE CONSIDERED IN THE RANKINGS.





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Goa, India



QS Higher Ed  
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Kuwait



EduData Summit &  
QS Masters Summit  
17-19 May 2023  
San Francisco, USA



QS Higher Ed  
Summit: Europe  
27-30 Jun 2023  
Dublin, Ireland



QS Higher Ed  
Summit: Americas  
13-15 Sep 2023  
Santo Domingo,  
Dominican Republic



QS Higher Ed  
Summit: Asia Pacific  
7-9 Nov 2023  
Kuala Lumpur,  
Malaysia



Reimagine Education  
Conference & Awards  
4-8 Dec 2023  
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### QS Yearbook 2023

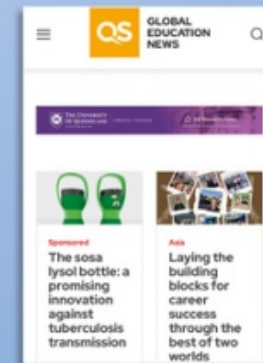


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institutions

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### Our monthly magazine, QS Insights

- Distributed to 55k higher education leaders
- Hosted on an interactive digital platform

# Unlock the full potential of your international student recruitment

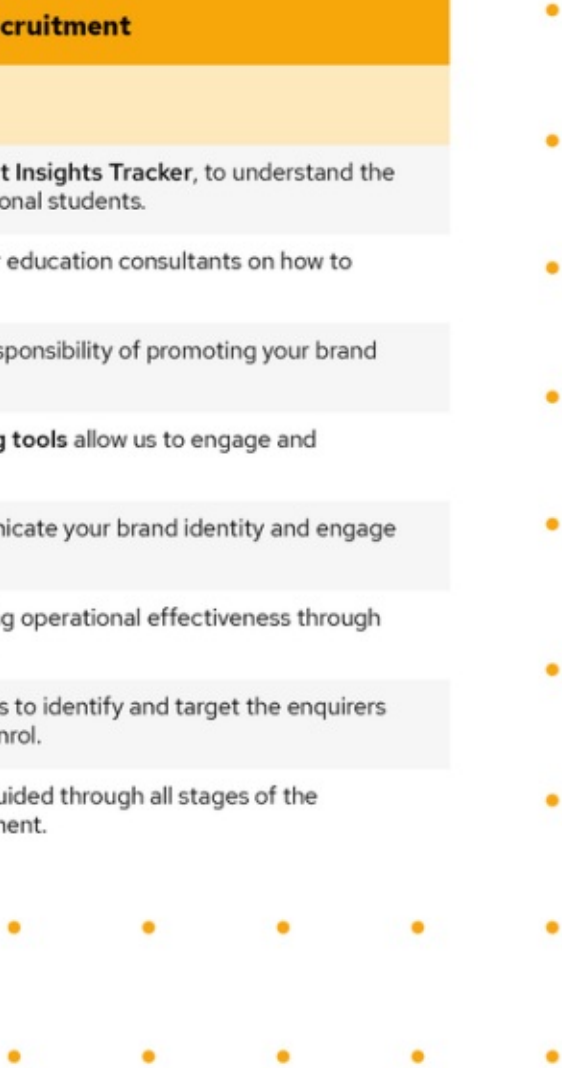
We can tailor our student recruitment solutions to meet your institution's unique challenges, providing an end-to-end service which delivers the best possible ROI.

Through a decade of insights from the QS International Student Survey and the 60 million visitors to our student website, TopUniversities.com, we know what prospective students want and expect.

We have created three packages depending on the level of support you require - to help you develop a data-driven recruitment strategy which connects you with your future international students:



Unlock the full potential of your international recruitment	
How we'll help	QS solution
<b>Understand</b> prospective student decision-making	Access our interactive insights dashboard, <b>QS Student Insights Tracker</b> , to understand the preferences and expectations of prospective international students.
<b>Refine</b> and plan your strategy	Benefit from <b>bespoke advice</b> from our team of higher education consultants on how to launch an impactful recruitment strategy.
<b>Engage</b> priority markets	Our <b>in-country representatives</b> are given the sole responsibility of promoting your brand in-market.
<b>Target</b> students in-market	Our <b>digital marketing, content experts and branding tools</b> allow us to engage and communicate with students in your target markets.
<b>Connect</b> with students	Profile your institution at our <b>student fairs</b> to communicate your brand identity and engage with quality prospects.
<b>Scale up</b> your international office	Scale up your international office operations, improving operational effectiveness through our <b>enquiry and admissions management services</b> .
<b>Convert</b> enquiries and offers	Our sector-leading <b>machine-learning models</b> allow us to identify and target the enquirers and offer holders who are most likely to convert and enrol.
<b>Enrol</b> students	Our QS <b>enrolment managers</b> ensure prospects are guided through all stages of the application process, from initial engagement to enrolment.



## Refine and develop a targeted recruitment strategy

How we'll help	QS solution
<b>Understand</b> prospective student decision-making	Access our interactive insights dashboard, <b>QS Student Insights Tracker</b> , to understand the preferences and expectations of prospective international students.
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<b>Enrol</b> students	Our <b>QS enrolment managers</b> ensure prospects are guided through all stages of the application process, from initial engagement to enrolment.

## Build your brand

How we'll help	QS solution
<b>Understand</b> prospective student decision-making	Access our interactive insights dashboard, <b>QS Student Insights Tracker</b> , to understand the preferences and expectations of prospective international students.
<b>Build</b> your brand	Benefit from <b>bespoke advice</b> from our team of higher education consultants on how to launch an impactful recruitment strategy. Understand and manage your brand's reputation using our <b>reputation management software</b> .
<b>Enhance</b> your brand	Increase your brand visibility and platform your brand's USPs through <b>digital marketing</b> and <b>QS Stars branding</b> . Work with our content team to create student-centric content and drive conversion to your <b>QS Advanced Profile</b> .
<b>Engage</b> audiences	Profile your institution at our <b>student fairs</b> to communicate your brand identity and engage with quality prospects.
<b>Activate</b> priority markets	Our <b>in-country reps</b> and enrolment QS managers help you activate priority markets through a bespoke suite of on-the-ground activities.

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