

#### **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.

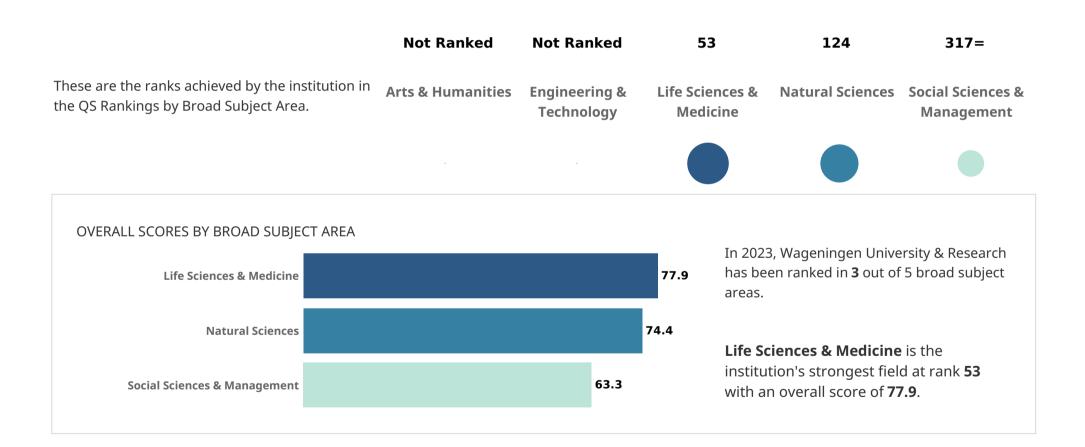
We hope you will find this useful.

Rankings Team,

**QS Institutional Performance Unit** 

## **WAGENINGEN UNIVERSITY & RESEARCH**

**Netherlands** 



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								
Engineering & Technology								
Life Sciences & Medicine	53	2	86.0	73.0	81.9	60.1	78.00	77.9
Natural Sciences	124	4	70.6	67.5	89.3	73.6	82.00	74.4
Social Sciences & Management	317=	11	59.0	57.2	89.0	70.0	95.00	63.3

## **Narrow Subject Area Scores and Ranks**

		Global Rank	Domestic Rank	Academic	Employer	Citations	H-index	IRN	Score
	Archaeology			27.5	27.2	67.4	63.8		35.1
	Architecture / Built Environment	101-150	3	59.2	69.6	81.1	72.8		63.8
es	Art & Design			48.7	58.6				49.7
aniti	English Language & Literature								
Hum	History			42.6	41.8	85.6	74.7		53.8
Arts & Humanities	History of Art (NEW)			55.8	22.0				52.4
Ari	Linguistics								
	Modern Languages			46.4	56.6				49.5
	Philosophy			21.4	47.2	72.8	63.2		32.0
	Computer Science & Information Systems	501-550	12	39.8	57.7	72.5	61.0	57.8	52.8
logy	Data Science and Artificial Intelligence (NEW)			50.5	47.2	82.8	58.3		55.5
Technology	Engineering - Chemical								
& Tec	Engineering - Civil & Structural								
ing 8	Engineering - Electrical & Electronic								
Engineering	Engineering - Mechanical, Aeronautical & Manufacturing								
Engi	Engineering - Mineral & Mining								
	Petroleum Engineering								

## **Narrow Subject Area Scores and Ranks (continued)**

		Global Rank	Domestic Rank	Academic	Employer	Citations	H-index	IRN	Score
	Agriculture & Forestry	1	1	100.0	95.1	93.9	100.0	98.40	98.4
ŏ	Anatomy & Physiology			52.6	28.7	95.1	69.3		65.0
es	Biological Sciences	38=	1	83.6	79.2	82.8	74.9	62.80	79.2
Sciences Iedicine	Medicine								
s Science: Medicine	Nursing								
Life	Pharmacy & Pharmacology								
_	Psychology			40.7	62.9	58.6	65.4	33.70	50.8
	Veterinary Science	24	2	79.0	85.3	90.8	79.0		83.2
	Chemistry								
S	Earth & Marine Sciences	51-100	3	76.3	82.9	96.5	87.1	58.50	81.4
Natural Sciences	Environmental Sciences	2	1	98.7	75.4	96.3	95.4	100.00	95.2
ie	Geography	51-100	3=	71.5	70.2	96.9	95.3		78.8
Sc	Geology	44=	3	75.5	88.6	95.3	85.4	57.90	82.5
ura	Geophysics	42	3	75.5	88.6	97.5	85.2	62.80	83.5
latı	Materials Science			40.2	64.5	69.9	64.7	37.10	53.2
2	Mathematics			42.9	56.8	66.1	57.0	26.90	49.7
	Physics & Astronomy			41.3	58.5	66.6	49.3	39.50	49.6
	Accounting & Finance			44.1	58.9	45.7	55.7		49.9
	Anthropology			53.9	47.9	67.2	57.4		55.0
	Business & Management Studies	351-400	9=	49.7	55.6	74.5	82.7		57.3
& Management	Communication & Media Studies			43.7	60.6	75.0	60.5		55.0
em	Development Studies	8=	1	84.1	76.9	95.6	93.4		86.5
ag	Economics & Econometrics	125=	7	69.4	58.8	72.3	65.5		67.1
lar	Education								
≥ ⊗	Hospitality & Leisure Management	151-160	4	55.2	29.1	70.1			42.9
	Law			44.4	57.0	93.3	73.9		55.1
enc	Library & Information Management								
Social Sciences	Marketing (NEW)			54.5	55.8	67.9	62.7		57.1
<u>e</u>	Politics & International Studies			44.2	58.5	88.9	75.9		56.1
OCİ	Social Policy & Administration								
S	Sociology								
	Sports-related Subjects			34.6	48.2	69.9	48.7		43.4
	Statistics & Operational Research								

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	59	43=	53
Arts & Humanities			
Engineering & Technology			
Natural Sciences	112=	128=	124
Social Sciences & Management	331=	265=	317=

#### **Narrow Subjects**

		2021	2022	2023
	Archaeology			
es	Architecture / Built Environment	101-150	51-100	101-150
ij	Art & Design			
Arts & Humanities	English Language & Literature			
<u> </u>	History			
×	History of Art (NEW)			
₹ ~	Linguistics			
Α̈́	Modern Languages			
	Philosophy			
	Computer Science & Information Systems	551-600	551-600	501-550
თ _	Data Science and Artificial Intelligence (NEW)			
Engineering Technology	Engineering - Chemical			
eri	Engineering - Civil & Structural			
ne :hn	Engineering - Electrical & Electronic			
ngi Tec	Engineering - Mechanical, Aeronautical & Manufactu			
ᇤ.	Engineering - Mineral & Mining			
	Petroleum Engineering			
	Agriculture & Forestry	1	1	1
જ	Anatomy & Physiology			
res Je	Biological Sciences	42	47=	38=
enicii	Medicine			
e Science Medicine	Nursing			
Life Sciences Medicine	Pharmacy & Pharmacology			
=	Psychology			
	Veterinary Science	17	15	24

#### Narrow Subjects (continued)

Natural Sciences

Social Sciences & Management

	2021	2022	2023
Chemistry			
Earth & Marine Sciences	51-100	51-100	51-100
Environmental Sciences	5=	5	2
Geography	51-100	51-100	51-100
Geology	49	41	44=
Geophysics	39=	35	42
Materials Science			
Mathematics			
Physics & Astronomy			
Accounting & Finance			
Anthropology			
Business & Management Studies	351-400	351-400	351-400
Communication & Media Studies			
Development Studies	13	12	8=
Economics & Econometrics	142=	147=	125=
Education			
Hospitality & Leisure Management		101-150	151-160
Law			
Library & Information Management			
Marketing (NEW)			
Politics & International Studies			
Social Policy & Administration			
Sociology			
Sports-related Subjects			
Statistics & Operational Research			





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Engage with new partners	Our detailed rating system, QS Stars, allows you to showcase your institution's strengths. Access a wealth of opportunities through Silver sponsorship of two QS Higher Education Summits.
<b>Analyse</b> your institution's reputation	Access one of our interactive insights dashboards: QS Academic Reputation Tracker or QS Student Insights Tracker.
Learn from experts	Receive delegate passes to learn best practice from other institutions and our experts at one of our QS Stars and Analytics user community events.
Reach new prospects	Feature in our monthly publication QS Insights magazine, or upgrade to a QS Advanced Profile on TopUniversities.com.
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.

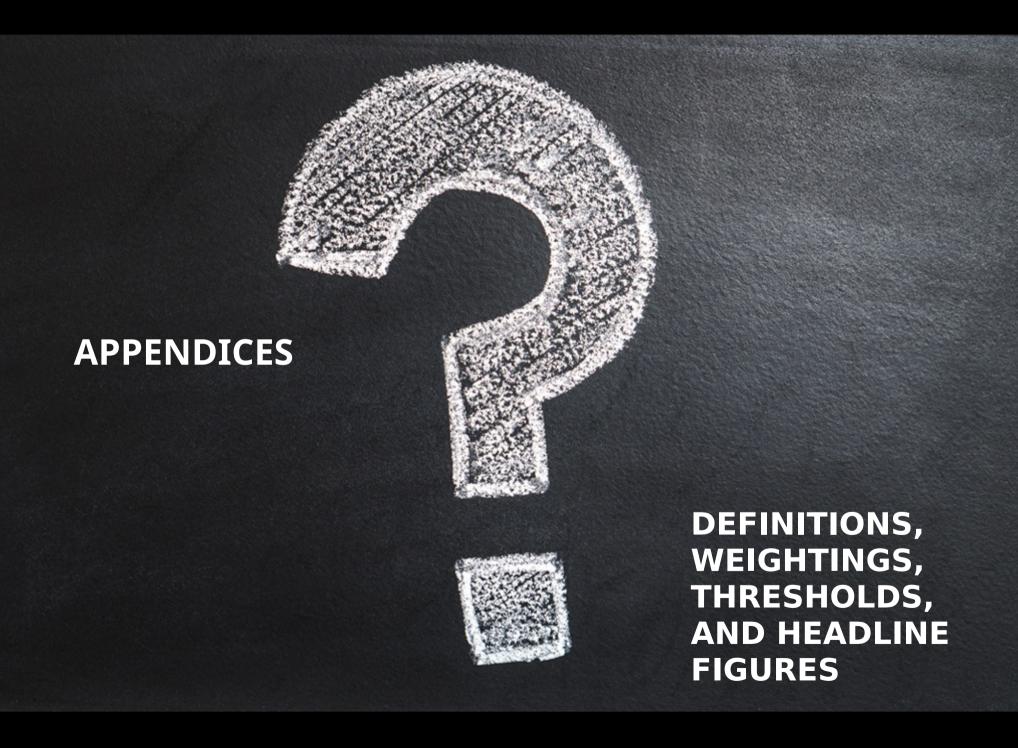


Manage and amplify your reputation		
How we'll help	QS solution	
Analyse your institution's reputation	Access our interactive insights dashboards: QS Academic Reputation Tracker and QS Employer Reputation Tracker.	
Reach new audiences	Feature in our monthly QS Insights magazine and upgrade to a QS Advanced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

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

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#### **METHODOLOGY: DEFINITIONS**

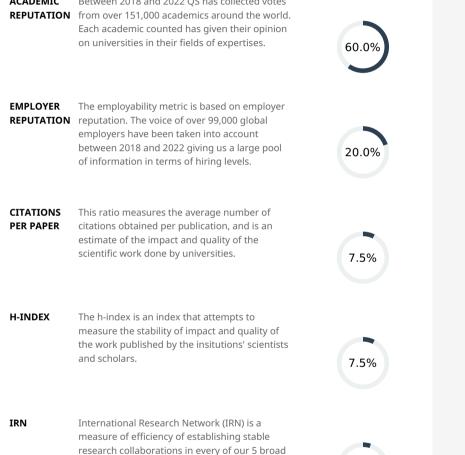
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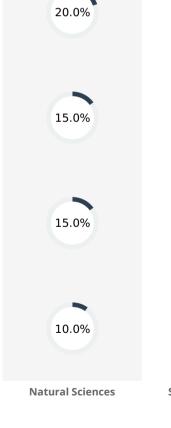
# ACADEMIC Between 2018 and 2022 QS has collected votes on universities in their fields of expertises. The employability metric is based on employer employers have been taken into account between 2018 and 2022 giving us a large pool of information in terms of hiring levels.

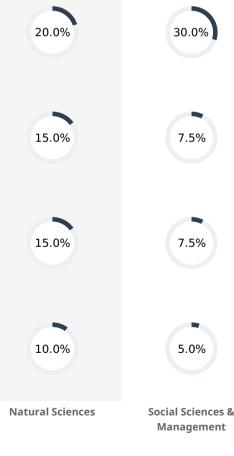
subject areas.







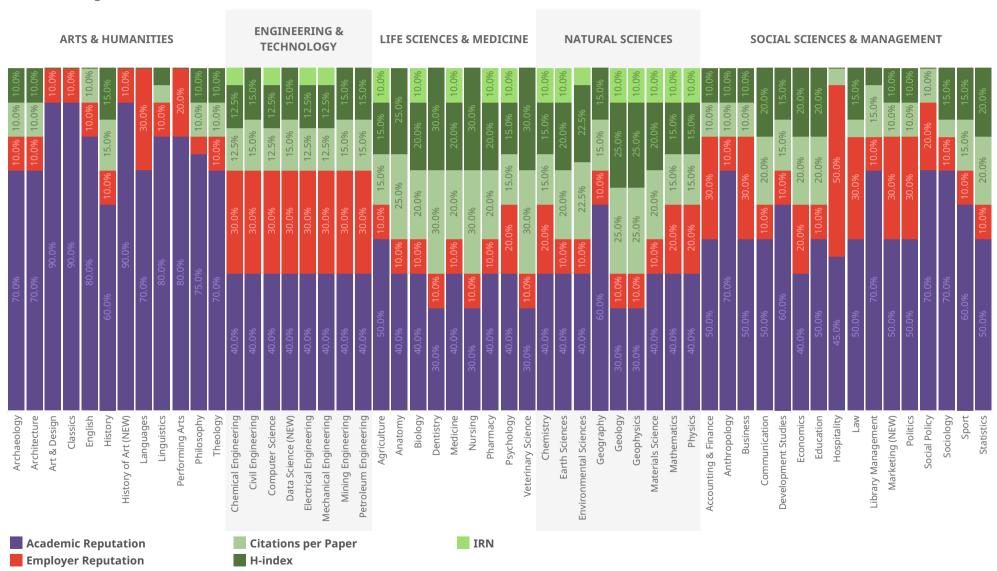




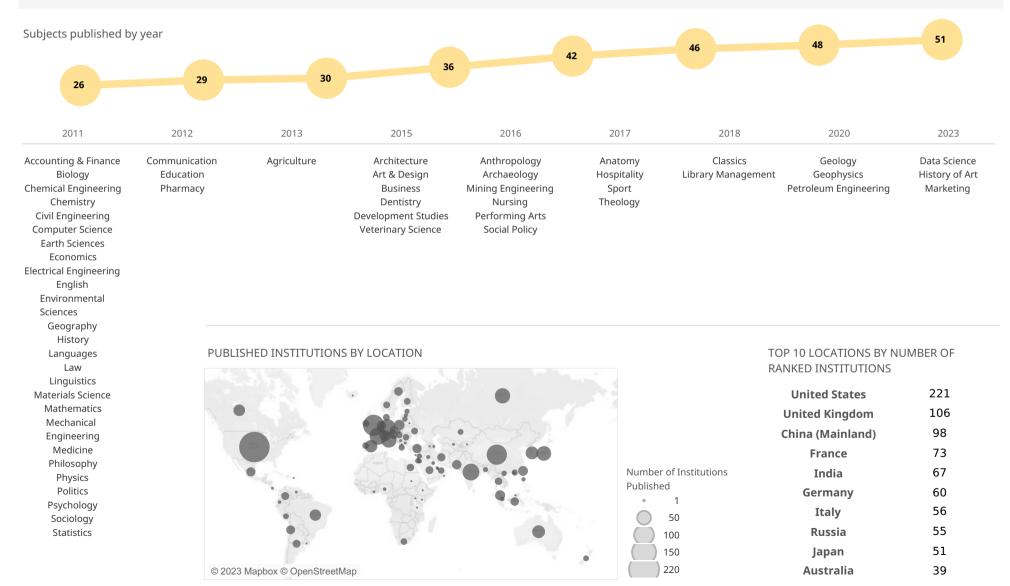
**Arts & Humanities** 

Engineering & Technology Life Sciences & Medicine

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.



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.



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

**Locations Evaluated** 

**Subjects Published** 

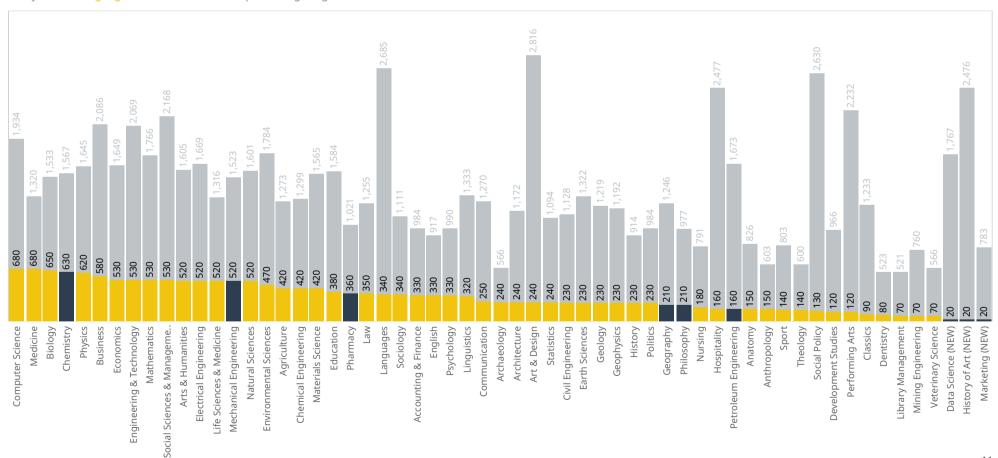
161

1,594

**Institutions Published** 

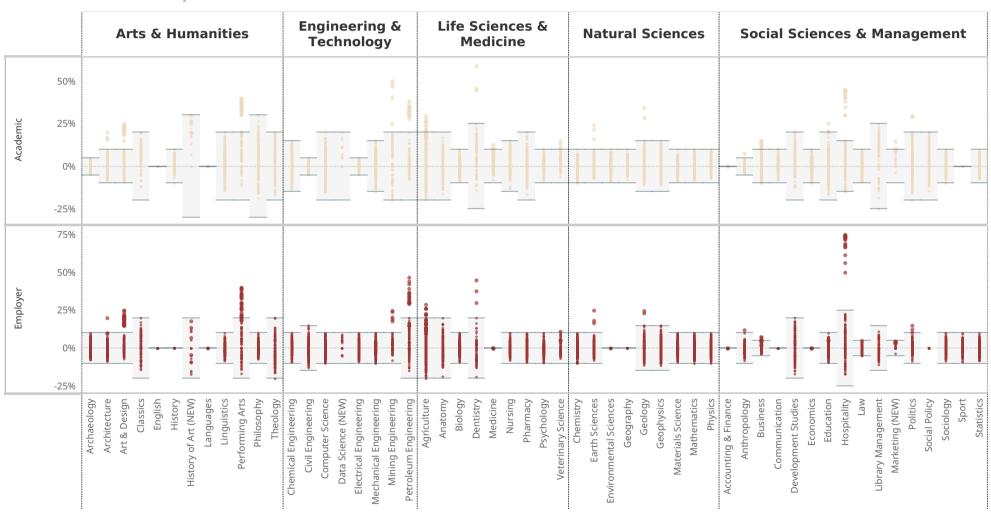
#### **INSTITUTIONS ANALYSED AND PUBLISHED BY SUBJECT - YEAR 2023**

Subjects with highlight color have extended publishing ranges.



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

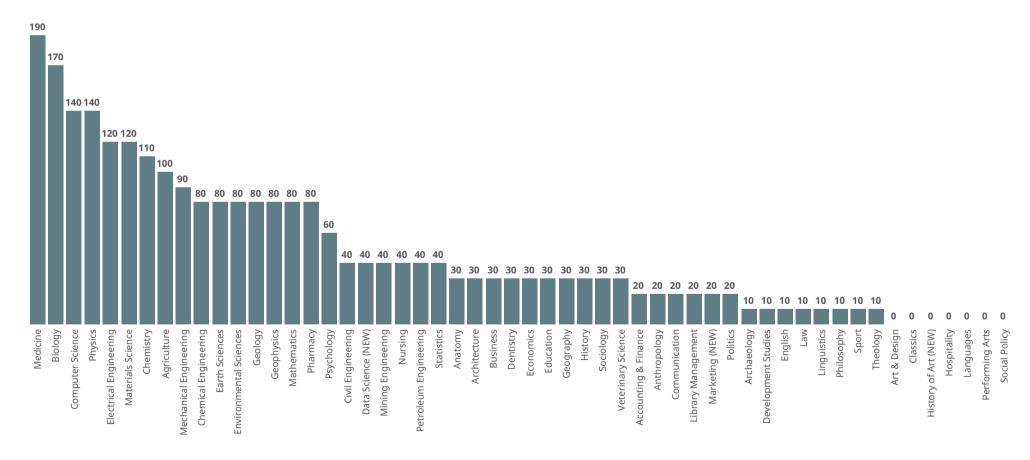


In order to feature in any discipline table, an institution must meet three simple prerequisites:

- 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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U	nlock the full potential of your international recruitment
How we'll help	QS solution
Understand prospective student decision-making	Access our interactive insights dashboard, QS Student Insights Tracker, to understand the preferences and expectations of prospective international students.
Refine 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.
Engage priority markets	Our <b>in-country representatives</b> are given the sole responsibility of promoting your brand in-market.
Target 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.
Connect with students	Profile your institution at our <b>student fairs</b> to communicate your brand identity and engage with quality prospects.
Scale up your international office	Scale up your international office operations, improving operational effectiveness through our <b>enquiry and admissions management services</b> .
Convert 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.
Enrol students	Our QS enrolment managers 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		
Understand prospective student decision- making	Access our interactive insights dashboard, QS Student Insights Tracker, to understand the preferences and expectations of prospective international students.		
Refine 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.		
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Enrol students	Our QS enrolment managers 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
Understand prospective student decision- making	Access our interactive insights dashboard, QS Student Insights Tracker, 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 reputation management software.
Enhance your brand	Increase your brand visibility and platform your brand's USPs through digital marketing and QS Stars branding. Work with our content team to create student-centric content and drive conversion to your QS Advanced Profile.
Engage audiences	Profile your institution at our <b>student fairs</b> to communicate your brand identity and engage with quality prospects.
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