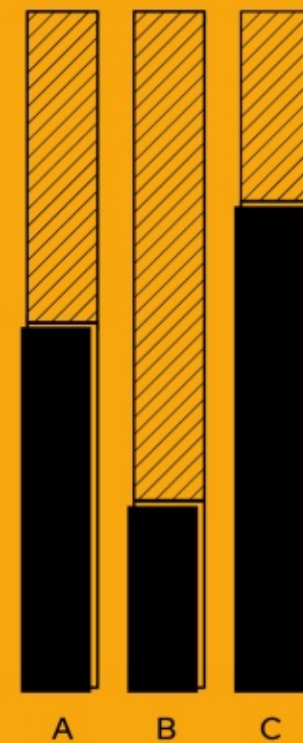
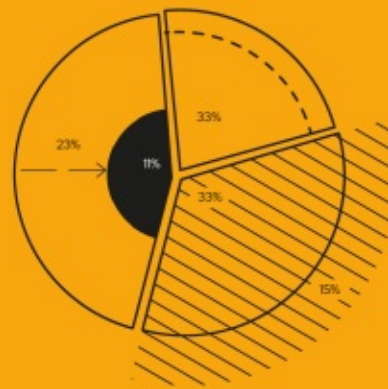
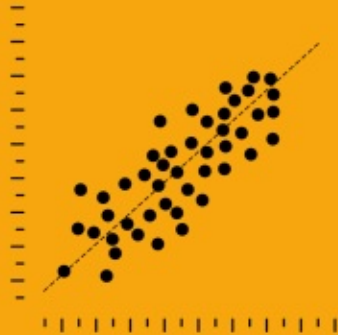


SUBJECT RANKINGS 2022



WELCOME TO THE 2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

Welcome to your institution's fact file for the QS World University Rankings by Subject 2022.

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 14.7 million unique papers, producing close to 96 million citations. 1543 institutions ranked across 51 subjects in 5 broad subject areas, creating over 17,700 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 shows a summary of your scores in all the subjects and broad subject areas you have been analysed in, as well as ranks in all the subjects and broad subject areas you are to be published in. The following table then shows you your results in the subject rankings for the last three years so you can track your progress.

This year, as we communicated in an email sent on March 2nd, we introduced International Research Network as an indicator for the broad subject area rankings. QS believes that research conducted with global partners is of immense value, and this metric serves to further shine light on institutions who are working cooperatively with international partners to add value to the global bank of research. You can find more on this indicator here:

<https://support.qs.com/hc/en-gb/articles/360021865579-International-Research-Network-IRN->

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.

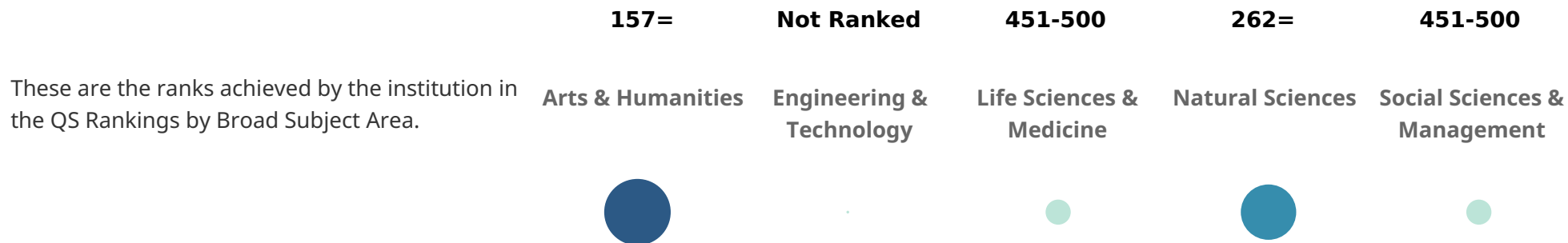
We hope you will find this useful.

Rankings Team,
QS Intelligence Unit

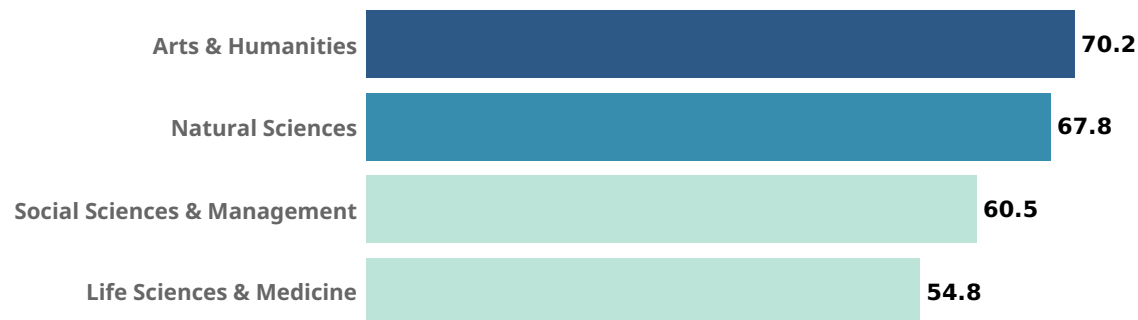
2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT AREA

UNIVERSITY OF HAWAI'I AT MĀNOA

United States



OVERALL SCORES BY BROAD SUBJECT AREA



In 2022, University of Hawai'i at Mānoa has been ranked in **4** out of 5 broad subject areas.

Arts & Humanities is the institution's strongest field at rank **157=** with an overall score of **70.2**.

2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

Below is the institution's detailed performance by indicator and overall score across all the subjects and broad subject areas that you have been nominated for in our academic reputation survey. It is very unusual for an institution to be analysed in all 51 narrow subjects and 5 broad subject areas.

The indicator International Research Network (IRN) has a score at broad subject level only.

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.
4. Score is not high enough to receive a published rank.

		Global Rank	Domestic Rank	Academic	Employer	Citations	H-index	Score	IRN
Arts & Humanities	Arts & Humanities	157=	41	73.2	66.3	77.8	66.3	70.2	45.0
	Archaeology	201-230	44=	54.2	38.5	77.5	67.4	56.3	
	Architecture / Built Environment			24.2	57.8	76.3	71.3	37.5	
	Art & Design			42.0	51.1			42.9	
	English Language & Literature	151-200	43=	65.2	60.0	64.4		64.6	
	History			52.5	35.8	74.4	62.1	55.6	
	Linguistics	34	12	81.0	57.0	75.3	73.3	77.9	
	Modern Languages	101-150	22=	72.6	61.9			69.4	
	Performing Arts			36.0	26.1			34.0	
	Philosophy			46.5	50.8	63.0	56.2	49.3	
	Theology, Divinity & Religious Studies			36.2	49.3	56.8	54.4	41.4	
Engineering & Technology	Engineering & Technology			46.5	58.7	85.4	71.1	58.1	62.0
	Computer Science & Information Systems			25.8	45.7	63.8	56.8	42.1	
	Engineering - Chemical			15.2	43.2	70.3	58.1	38.3	
	Engineering - Civil & Structural			28.6	41.8	68.7	58.7	43.1	
	Engineering - Electrical & Electronic			30.6	43.6	75.4	65.4	46.4	
	Engineering - Mechanical, Aeronautical & Manufact..			31.4	51.6	61.7	57.4	45.9	
	Petroleum Engineering								

If you have a displayed score in reputation and citation indicators then you met the minimum threshold for consideration.

2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

		Global Rank	Domestic Rank	Academic	Employer	Citations	H-index	Score	IRN
Life Sciences & Medicine	Life Sciences & Medicine	451-500	117=	44.7	61.2	71.5	55.9	54.8	54.00
	Agriculture & Forestry	201-250	42=	34.5	55.9	88.8	83.9	57.4	
	Anatomy & Physiology			40.6	46.6	70.4	69.5	55.9	
	Biological Sciences	451-500	109=	44.5	43.3	81.2	63.3	58.3	
	Medicine	501-550	103=	25.1	46.8	87.5	60.5	51.7	
	Nursing								
	Pharmacy & Pharmacology								
	Psychology			48.5	54.7	75.5	75.6	60.6	
	Veterinary Science			29.2	44.6	38.2	32.6	34.5	
Natural Sciences	Natural Sciences	262=	54=	59.3	59.8	92.5	73.9	67.8	72.00
	Chemistry			10.7	50.4	66.6	48.5	37.4	
	Earth & Marine Sciences	51-100	23=	74.1	55.1	95.2	87.9	80.9	
	Environmental Sciences	301-350	62=	49.1	55.0	89.3	81.4	67.8	
	Geography	151-200	26=	70.5	49.9	81.8	65.8	69.4	
	Geology	51-100	22=	73.7	58.2	95.0	87.5	82.7	
	Geophysics	51-100	22=	73.6	58.3	94.6	86.3	82.2	
	Materials Science			25.1	38.2	66.9	54.2	44.1	
	Mathematics			34.2	53.1	62.2	54.7	47.7	
	Physics & Astronomy	251-300	57=	55.5	38.5	94.5	74.4	63.7	
Social Sciences & Management	Social Sciences & Management	451-500	78=	56.1	60.6	85.6	70.6	60.5	52.00
	Accounting & Finance			45.4	47.6	66.2	64.4	50.0	
	Anthropology	51-100	18=	68.8	66.2	74.2	67.3	68.9	
	Business & Management Studies	451-500	86=	41.4	50.6	95.4	88.1	54.2	
	Communication & Media Studies	201-240	66=	54.0	55.6	89.3	73.7	65.2	
	Development Studies								
	Economics & Econometrics	501-520	104=	41.2	51.2	76.7	47.9	51.6	
	Education	201-250	55=	55.2	54.5	75.6	69.3	62.0	
	Hospitality & Leisure Management								
	Law			41.3	51.1	82.5	68.6	50.4	
	Library & Information Management			41.2	32.5	67.7	64.3	45.5	
	Politics & International Studies			49.9	51.0	70.0	56.1	52.9	
	Social Policy & Administration			47.9	44.8	70.4		49.5	
	Sociology	301-330	62=	51.0	58.6	79.5	62.5	54.9	
	Sports-related Subjects			34.3	32.7	61.0	42.0	39.3	
	Statistics & Operational Research			31.6	38.5	51.2	47.4	39.4	



For more information, please visit
www.qs.com/solutions/research-intelligence/qs-stars

A YARDSTICK OF INTERNATIONAL ACADEMIC STANDARDS

QS Stars is a rating system providing your institution with an overall score, as well as ratings in 12 categories, which you can use to promote your brand on an international scale. Since its launch in 2010, QS Intelligence Unit has rated over 275 institutions in 45 countries with QS Stars.

Drive institutional development

Enhance brand recognition

Improve performance in key areas

Attract prospective students

“

“The new QS Stars rating system further recognizes NTU’s strengths as a world university across a broader set of criteria than can be measured in any ranking system and provides information for our many stakeholders – current students, prospective students, parents, teachers, employers, fellow academics as well as our local community”

Bertil Andersson, President, Nanyang Technological University, Singapore

2022 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.

		2020	2021	2022
Arts & Humanities	Arts & Humanities	183	172	157=
	Art & Design			
	History			
	Archaeology	151-200	151-200	201-230
	Architecture / Built Environment			
	English Language & Literature	151-200	151-200	151-200
	Linguistics	43	28=	34
	Modern Languages	101-150	101-150	101-150
	Performing Arts			
	Philosophy		151-200	
	Theology, Divinity & Religious Studies			
Engineering & Technology	Engineering & Technology			
	Computer Science & Information Systems			
	Engineering - Chemical			
	Engineering - Civil & Structural			
	Engineering - Mechanical, Aeronautical & Manufactu..			
	Engineering - Electrical & Electronic			
	Petroleum Engineering			
Life Sciences & Medicine	Life Sciences & Medicine	401-450	401-450	451-500
	Agriculture & Forestry	151-200	201-250	201-250
	Anatomy & Physiology			
	Biological Sciences	351-400	401-450	451-500
	Medicine	401-450	451-500	501-550
	Pharmacy & Pharmacology			
	Psychology	201-250	201-250	
	Veterinary Science			
	Nursing			
		2020	2021	2022
Natural Sciences	Natural Sciences	232=	203=	262=
	Chemistry			
	Earth & Marine Sciences	44=	34=	51-100
	Environmental Sciences	301-350	251-300	301-350
	Geography	101-150	101-150	151-200
	Materials Science			
	Mathematics			
	Physics & Astronomy	201-250	201-250	251-300
	Geology		24=	51-100
	Geophysics		26=	51-100
Social Sciences & Management	Social Sciences & Management	400=	401-450	451-500
	Accounting & Finance			
	Anthropology			51-100
	Business & Management Studies	351-400	351-400	451-500
	Communication & Media Studies	151-200	151-200	201-240
	Development Studies			
	Economics & Econometrics	401-450		501-520
	Education	151-200	151-200	201-250
	Hospitality & Leisure Management			
	Law			
	Library & Information Management			
	Politics & International Studies			
	Social Policy & Administration			
	Sociology			301-330
	Sports-related Subjects			
	Statistics & Operational Research			

APPENDICES



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

2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

METHODOLOGY: DEFINITIONS

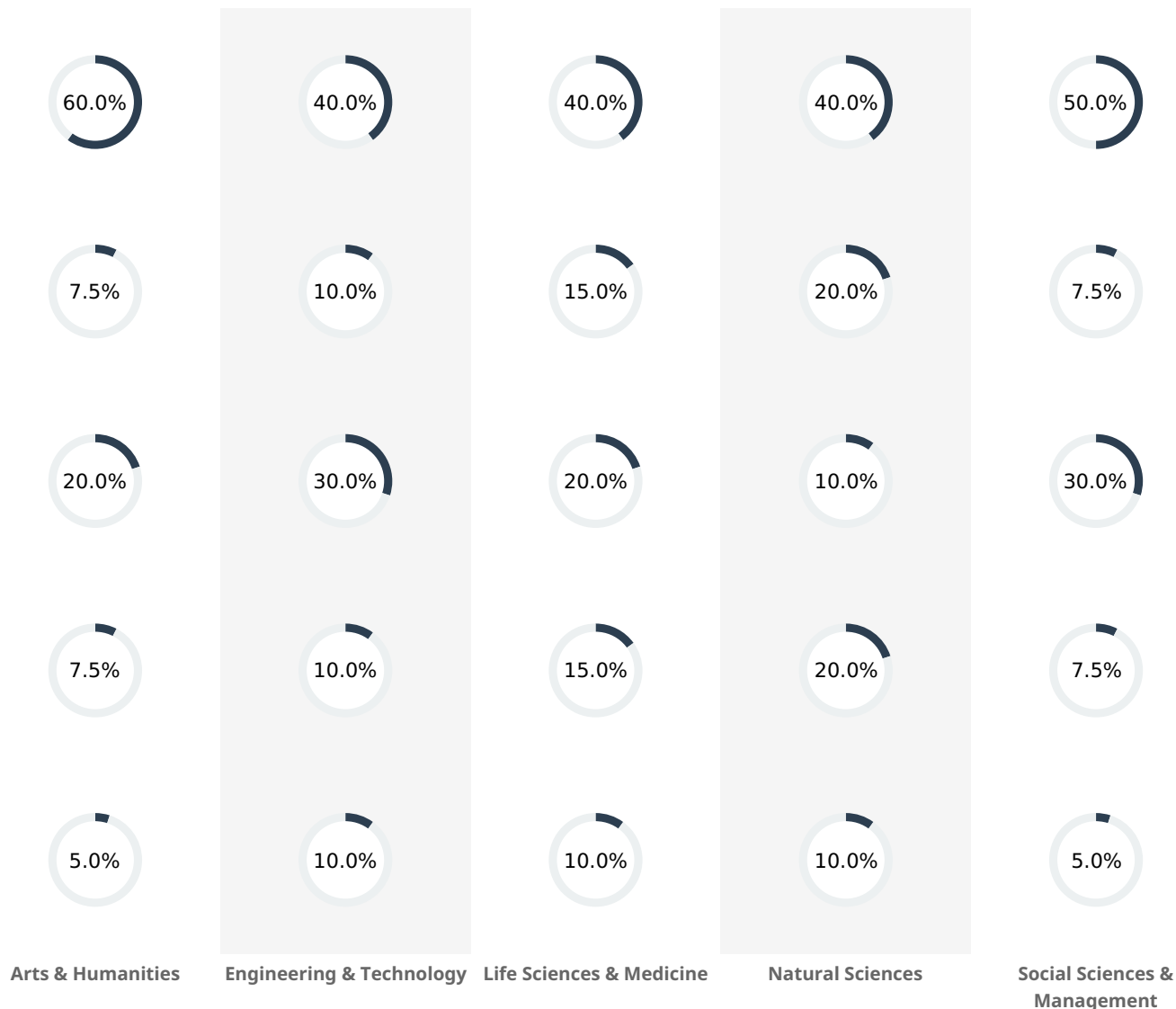
ACADEMIC REPUTATION Between 2017 and 2021 QS has collected votes from over 130,000 academics around the world. Each academic counted has given their opinion on universities in their fields of expertise.

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.

EMPLOYER REPUTATION The employability metric is based on employer reputation. The voice of over 75,000 global employers have been taken into account between 2017 and 2021 giving us a large pool of information in terms of hiring levels.

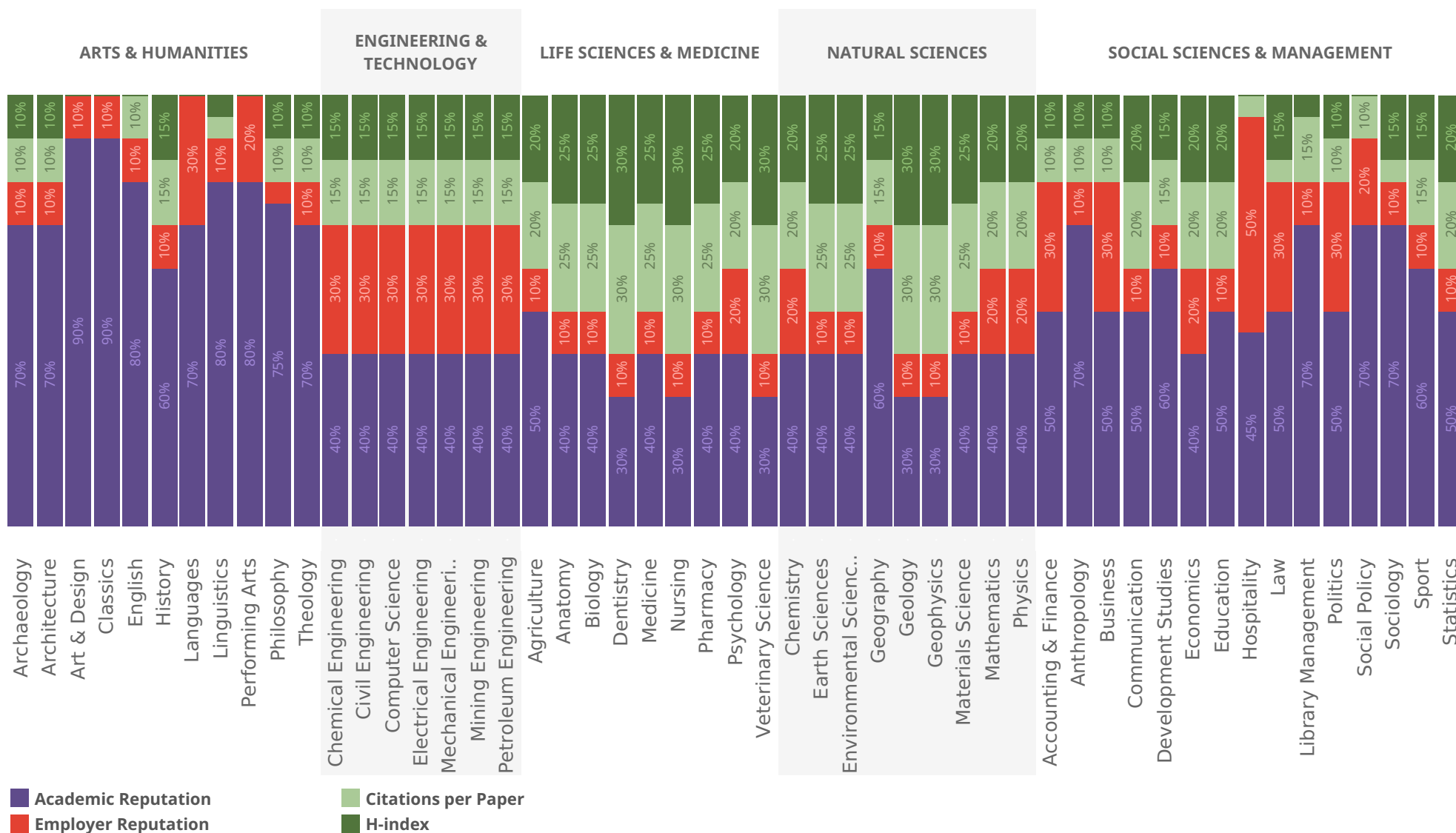
H-INDEX The h-index is an index that attempts to measure the stability of impact and quality of the work published by the institutions' scientists and scholars.

IRN International Research Network (IRN) is a measure of efficiency of establishing stable research collaborations in every of our 5 broad subject areas. It is introduced in the rankings by broad subject area only.



2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

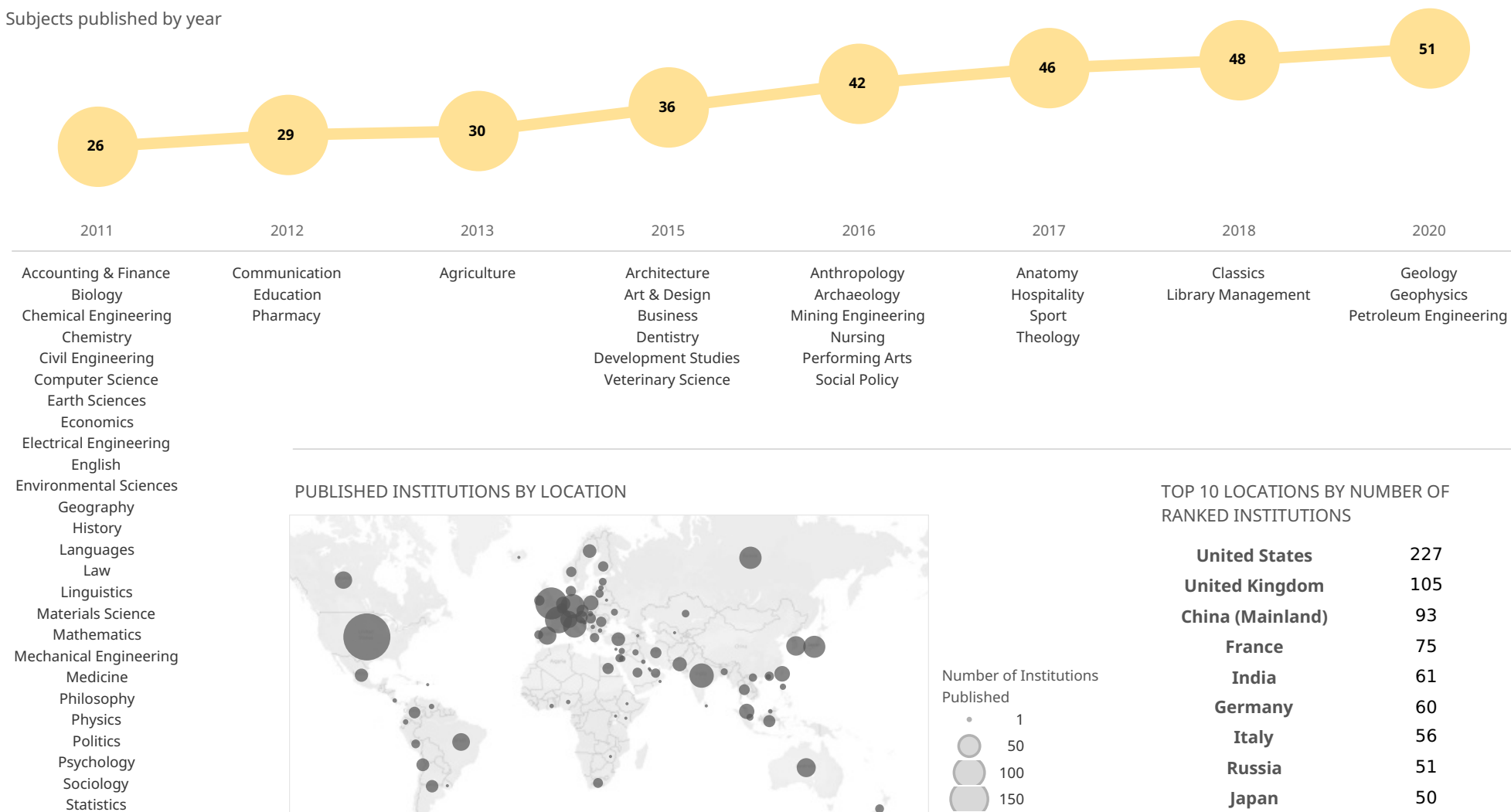
We use a variable approach to the weightings for the different subjects. The chart below provides details of the combinations used in the 2022 edition of the rankings.



2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

The **QS World University Rankings® by Subject** ranks the world's top universities in individual subject areas, covering 51 disciplines as of 2022. A list of the considered subjects, grouped by the year of first release, is presented below.

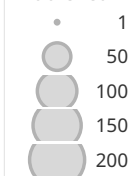
Subjects published by year



PUBLISHED INSTITUTIONS BY LOCATION



Number of Institutions
Published



TOP 10 LOCATIONS BY NUMBER OF
RANKED INSTITUTIONS

United States	227
United Kingdom	105
China (Mainland)	93
France	75
India	61
Germany	60
Italy	56
Russia	51
Japan	50
South Korea	39

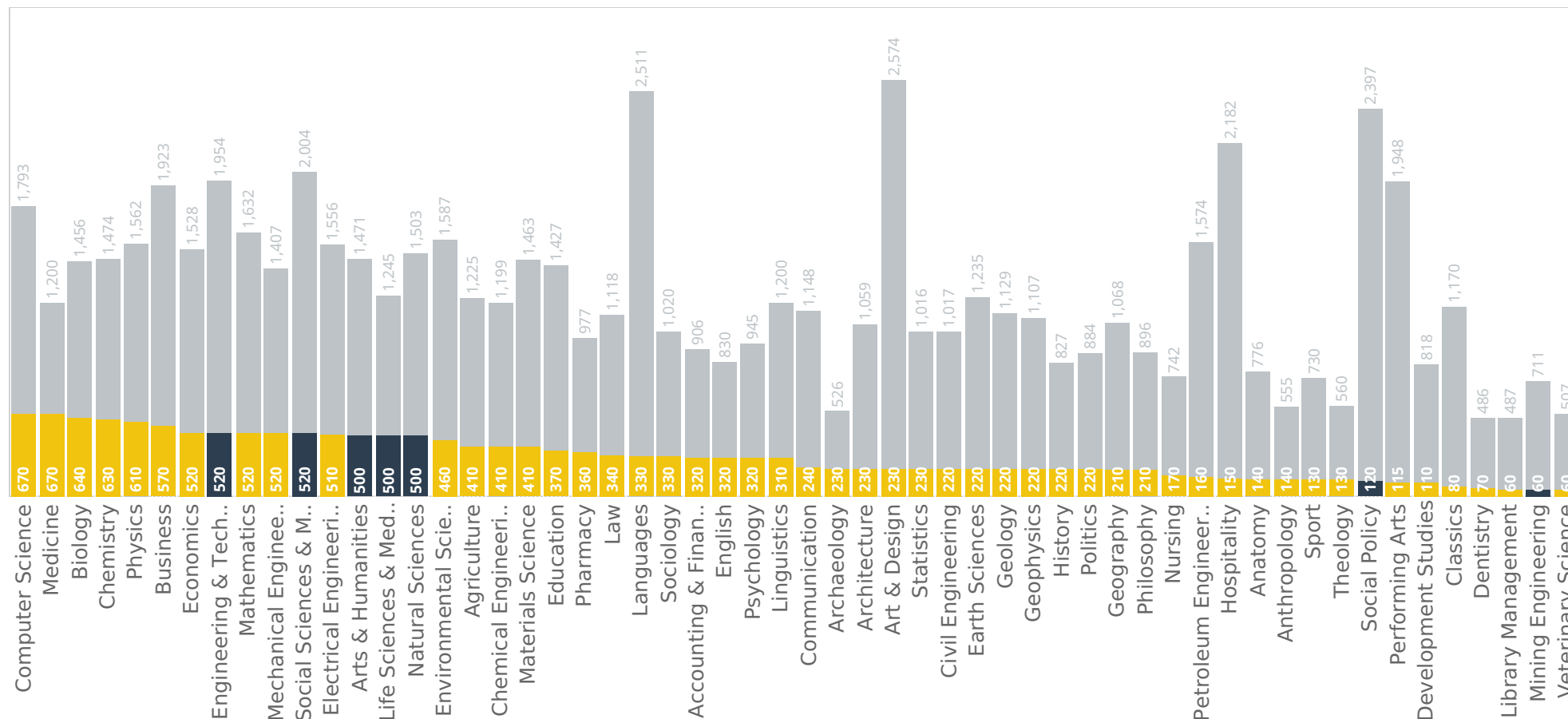
2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

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

Subjects Published	Locations Evaluated	Institutions Published
51	161	1,543

INSTITUTIONS ANALYSED AND PUBLISHED BY SUBJECT - YEAR 2022

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





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03

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02

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04

QS SUBJECT FOCUS SUMMIT

A global forum designed to bring about a deepened and shared understanding of challenges and opportunities facing the subject in focus.

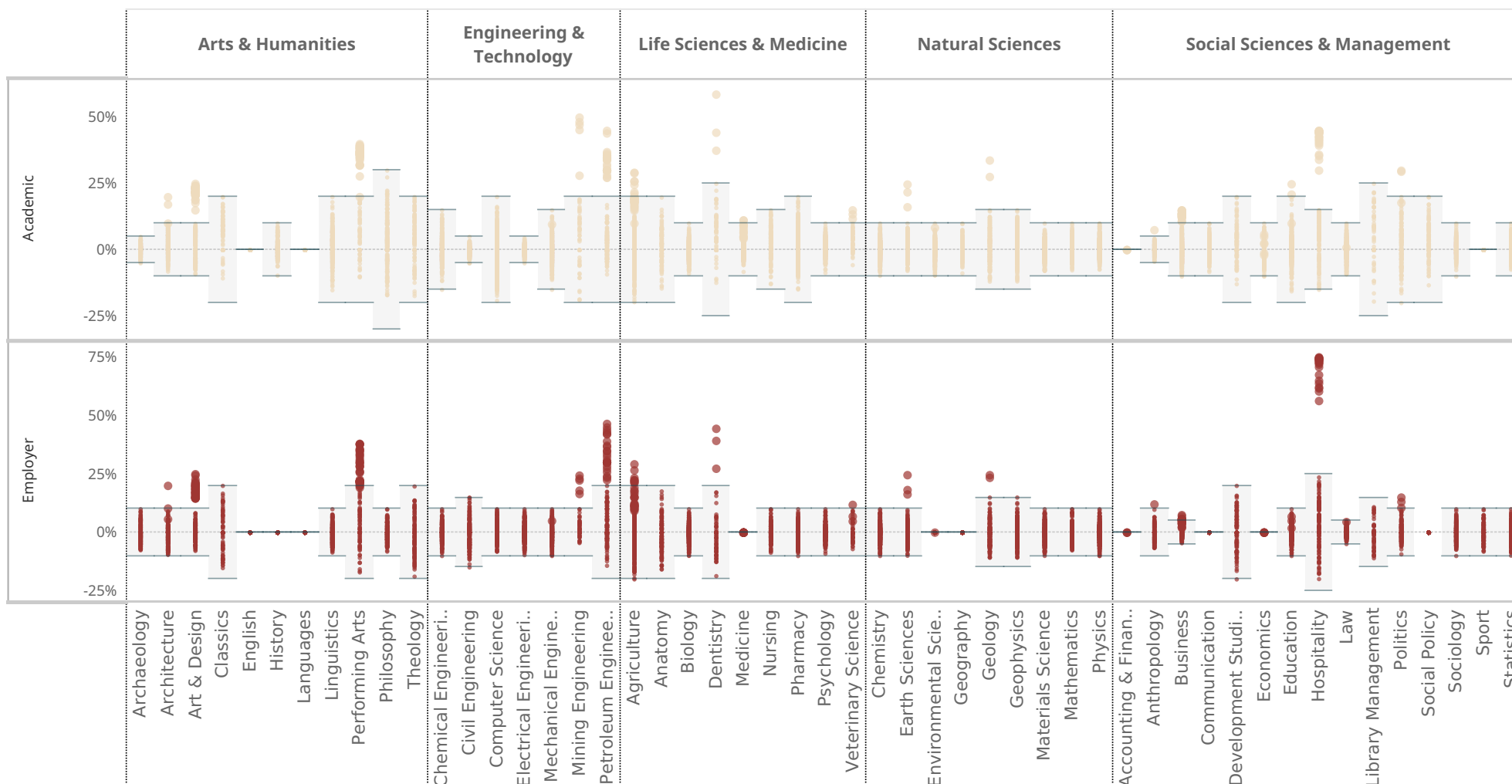
For more information, please visit
www.qs.com/solutions/events/higher-education-conferences



2022 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 rank calculated for each subject is compared against the rank obtained in the relevant broad subject area containing the said subject according to the QS mapping. For example, the results in Biology are compared against the overall rank in Life Sciences & Medicine. Whenever the 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 e..

DISTRIBUTION OF SPECIALIST ADJUSTMENTS - REPUTATION



2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

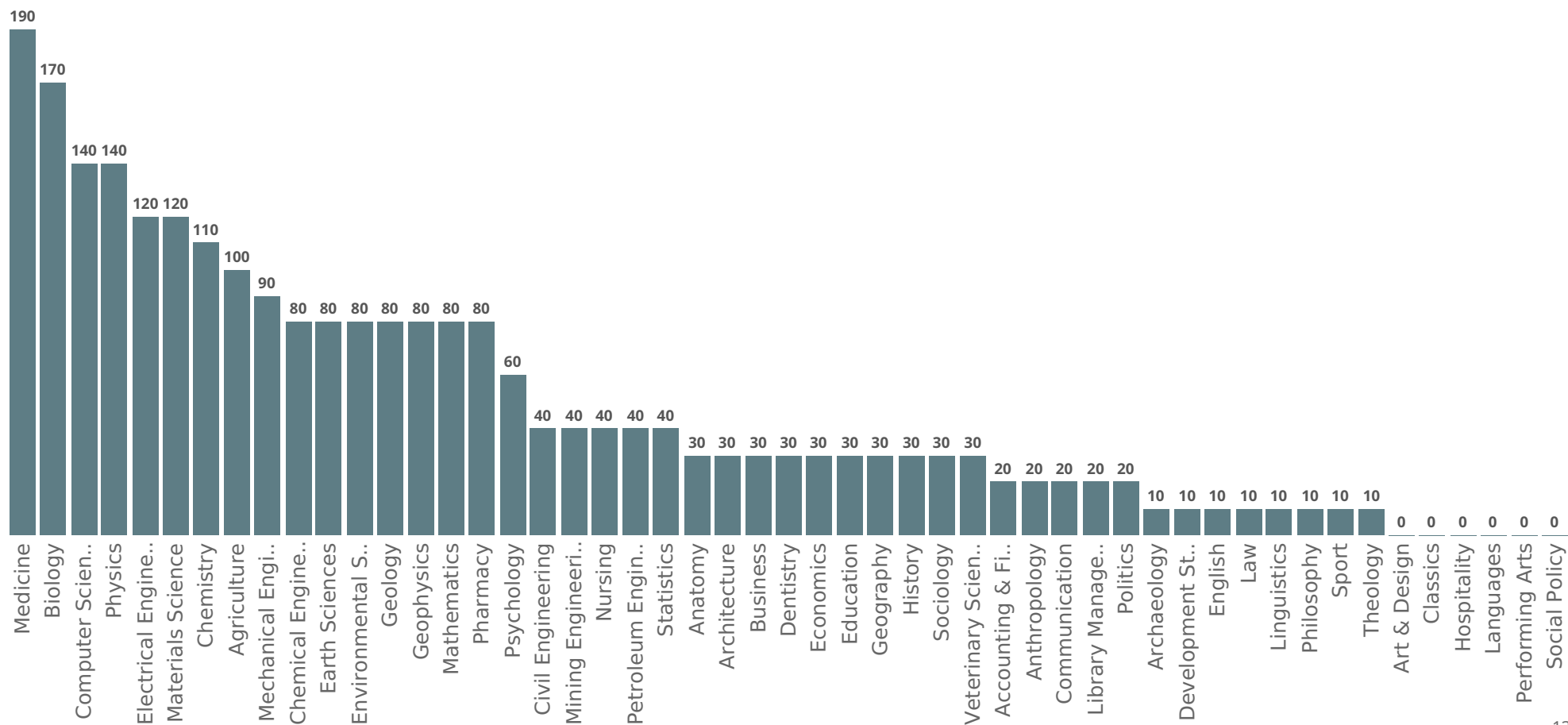
In order to feature in any discipline table, an institution must meet three simple prerequisites:

- 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 2022

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





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