

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.

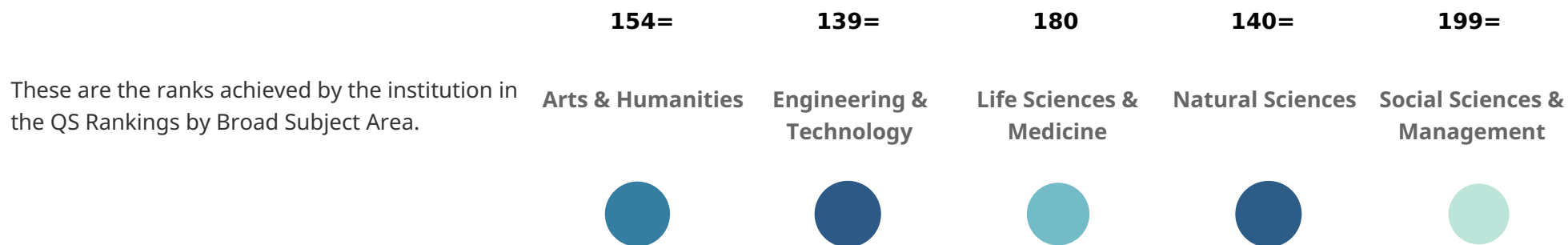
We hope you will find this useful.

Rankings Team,
QS Intelligence Unit

2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT AREA

UNIVERSIDADE ESTADUAL DE CAMPINAS (UNICAMP)

Brazil



OVERALL SCORES BY BROAD SUBJECT AREA



In 2022, Universidade Estadual de Campinas (Unicamp) has been ranked in 5 out of 5 broad subject areas.

Engineering & Technology is the institution's strongest field at rank **139=** with an overall score of **74.3**.

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	154=	2	76.8	70.6	63.3	51.3	70.4	32.0
	Archaeology								
	Architecture / Built Environment	101-150	3	59.1	71.7	69.4	62.1	61.7	
	Art & Design	151-200	2=	51.5	74.4			53.8	
	Classics & Ancient History			49.8	46.5			49.5	
	English Language & Literature								
	History	101-150	2=	67.5	63.6	62.0	59.7	65.1	
	Linguistics	151-200	1=	63.6	71.2	52.9	52.1	63.3	
	Modern Languages	81=	2	76.3	70.3			74.5	
	Performing Arts			58.9	55.3			58.2	
	Philosophy	151-200	1=	58.8	68.1	63.5	58.6	59.7	
Theology, Divinity & Religious Studies									
Engineering & Technology	Engineering & Technology	139=	2	77.5	69.8	79.7	67.6	74.3	77.0
	Computer Science & Information Systems	118=	2	59.4	74.5	69.2	64.9	66.2	
	Engineering - Chemical	81=	1=	73.2	74.8	82.5	75.5	75.4	
	Engineering - Civil & Structural	151-200	3	61.7	70.6	72.5	63.8	66.3	
	Engineering - Electrical & Electronic	91=	1	68.8	73.7	84.8	72.2	73.2	
	Engineering - Mechanical, Aeronautical & Manufact..	124	2	68.5	76.1	78.3	66.7	72.0	
	Engineering - Mineral & Mining								
	Petroleum Engineering	31	1	61.4	69.0	86.7	81.3	70.5	

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	180	2	76.1	70.0	73.7	50.0	68.7	66.00
	Agriculture & Forestry	47	1	61.2	68.2	88.9	87.1	72.6	
	Anatomy & Physiology			57.2	81.0	74.4	75.1	68.4	
	Biological Sciences	151-200	2	68.5	69.9	76.3	63.9	69.4	
	Dentistry	32	2	57.3	74.0	78.9	67.9	68.6	
	Medicine	201-250	2=	64.0	67.2	79.6	55.4	66.1	
	Nursing	101-150	2	60.9	66.8	83.9	73.4	72.1	
	Pharmacy & Pharmacology	101-150	2=	61.4	74.0	81.9	78.1	72.0	
	Psychology								
Veterinary Science			54.1	80.6	61.8	45.5	56.5		
Natural Sciences	Natural Sciences	140=	2	76.0	70.5	78.5	72.9	74.4	72.00
	Chemistry	114	2	72.6	75.3	75.8	62.0	71.7	
	Earth & Marine Sciences			63.1	73.8	77.9	64.5	68.2	
	Environmental Sciences	151-200	2=	72.3	70.2	83.0	76.5	75.8	
	Geography	101-150	2=	76.5	68.2	73.3	62.0	73.0	
	Geology			59.6	77.7	76.3	63.7	67.7	
	Geophysics			59.6	77.7	73.6	62.5	66.5	
	Materials Science	101-150	1=	71.0	67.4	82.5	65.8	72.2	
	Mathematics	124=	2	71.9	68.6	69.6	69.9	70.4	
	Physics & Astronomy	132=	2	66.1	72.2	79.9	77.0	72.3	
Social Sciences & Management	Social Sciences & Management	199=	2	71.8	67.7	76.0	57.7	68.5	45.00
	Accounting & Finance								
	Anthropology	101-140	3	67.5	53.7	56.0	58.0	64.0	
	Business & Management Studies								
	Communication & Media Studies								
	Development Studies	51-100	1=	64.2	74.4	60.3	58.0	63.7	
	Economics & Econometrics	251-300	5	62.8	67.9	64.4	46.9	61.0	
	Education	151-200	2	64.8	72.6	66.7	59.4	64.9	
	Hospitality & Leisure Management								
	Law								
	Library & Information Management								
	Politics & International Studies	151-200	4=	63.6	68.3	53.8	46.4	62.3	
	Social Policy & Administration								
	Sociology	100	2	73.4	73.3	68.2	57.8	70.8	
	Sports-related Subjects								
Statistics & Operational Research	101-150	2=	72.8	69.8	64.7	66.7	69.7		



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

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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	133=	135=	154=
	Art & Design	101-150	151-200	151-200
	History	151-200	101-150	101-150
	Archaeology			
	Architecture / Built Environment	101-150	101-150	101-150
	Classics & Ancient History			
	English Language & Literature			
	Linguistics	151-200	101-150	151-200
	Modern Languages	51-100	88=	81=
	Performing Arts			
	Philosophy		151-200	151-200
	Theology, Divinity & Religious Studies			
	Engineering & Technology	Engineering & Technology	131=	134=
Computer Science & Information Systems		101-150	113	118=
Engineering - Chemical		51-100	87	81=
Engineering - Civil & Structural		151-200	151-200	151-200
Engineering - Mechanical, Aeronautical & Manufactu..		101-150	107=	124
Engineering - Electrical & Electronic		101-150	116	91=
Engineering - Mineral & Mining				
Petroleum Engineering			28	31
Life Sciences & Medicine		Life Sciences & Medicine	199=	216=
	Agriculture & Forestry	51-100	49=	47
	Anatomy & Physiology			
	Biological Sciences	151-200	151-200	151-200
	Medicine	201-250	201-250	201-250
	Pharmacy & Pharmacology	151-200	101-150	101-150
	Psychology			
	Veterinary Science			
	Dentistry	29=	26	32
	Nursing			101-150

		2020	2021	2022	
Natural Sciences	Natural Sciences	139=	143=	140=	
	Chemistry	101-150	120=	114	
	Earth & Marine Sciences				
	Environmental Sciences	151-200	151-200	151-200	
	Geography	101-150	101-150	101-150	
	Materials Science	151-200	151-200	101-150	
	Mathematics	151-200	151-200	124=	
	Physics & Astronomy	101-150	129=	132=	
	Geology				
	Geophysics				
	Social Sciences & Management	Social Sciences & Management	168=	162	199=
		Accounting & Finance			
		Anthropology		101-120	101-140
Business & Management Studies					
Communication & Media Studies					
Development Studies				51-100	
Economics & Econometrics		201-250	201-250	251-300	
Education		151-200	151-200	151-200	
Hospitality & Leisure Management					
Law					
Library & Information Management					
Politics & International Studies		151-200	151-200	151-200	
Social Policy & Administration					
Sociology		101-150	101-150	100	
Sports-related Subjects					
Statistics & Operational Research		101-150	101-150	101-150	

APPENDICES



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

2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

METHODOLOGY: DEFINITIONS

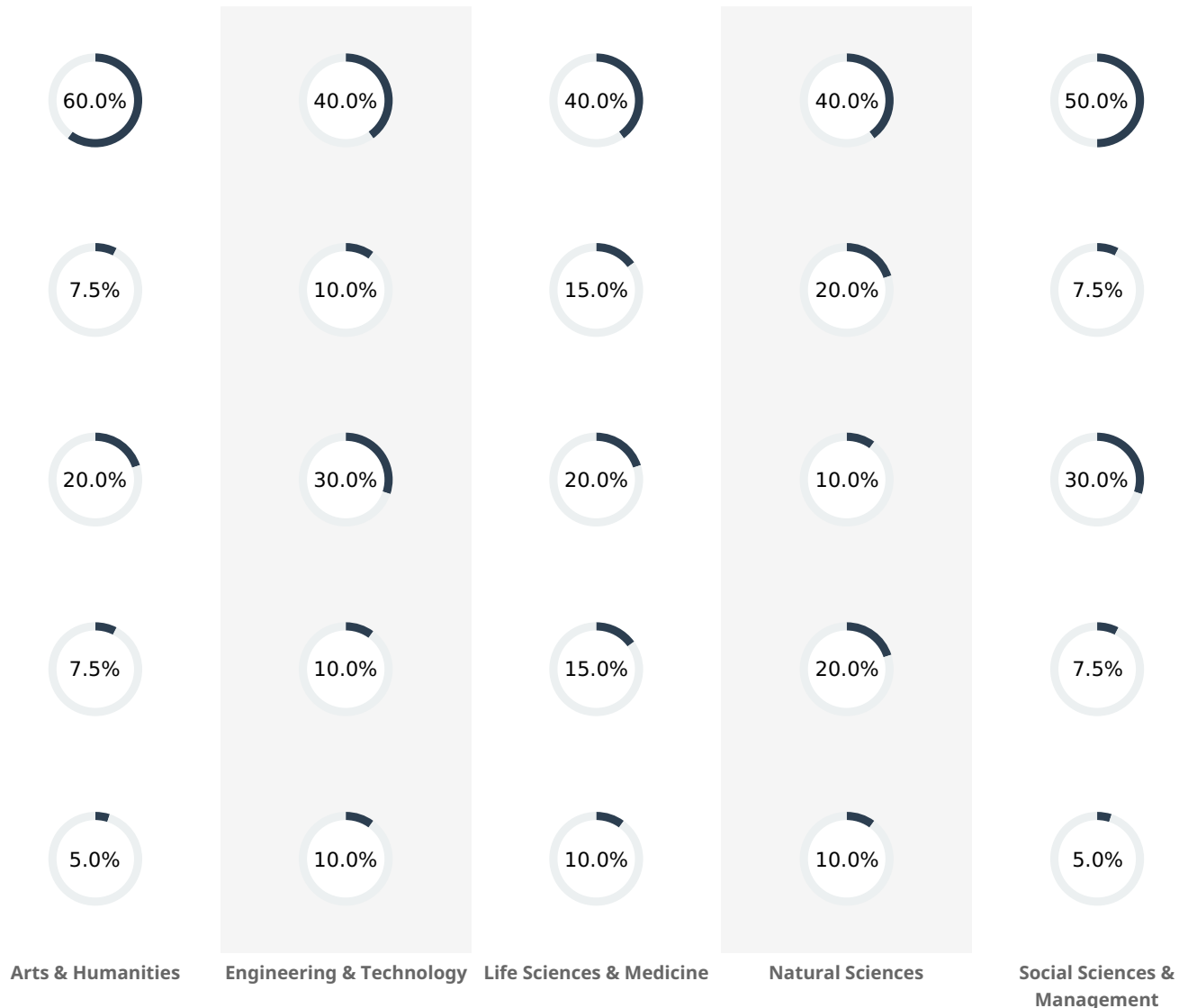
ACADEMIC REPUTATION Between 2017 and 2021 QS has collected votes from over 130,000 academics around the world. Each academic counted has given their opinion on universities in their fields of expertise.

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.

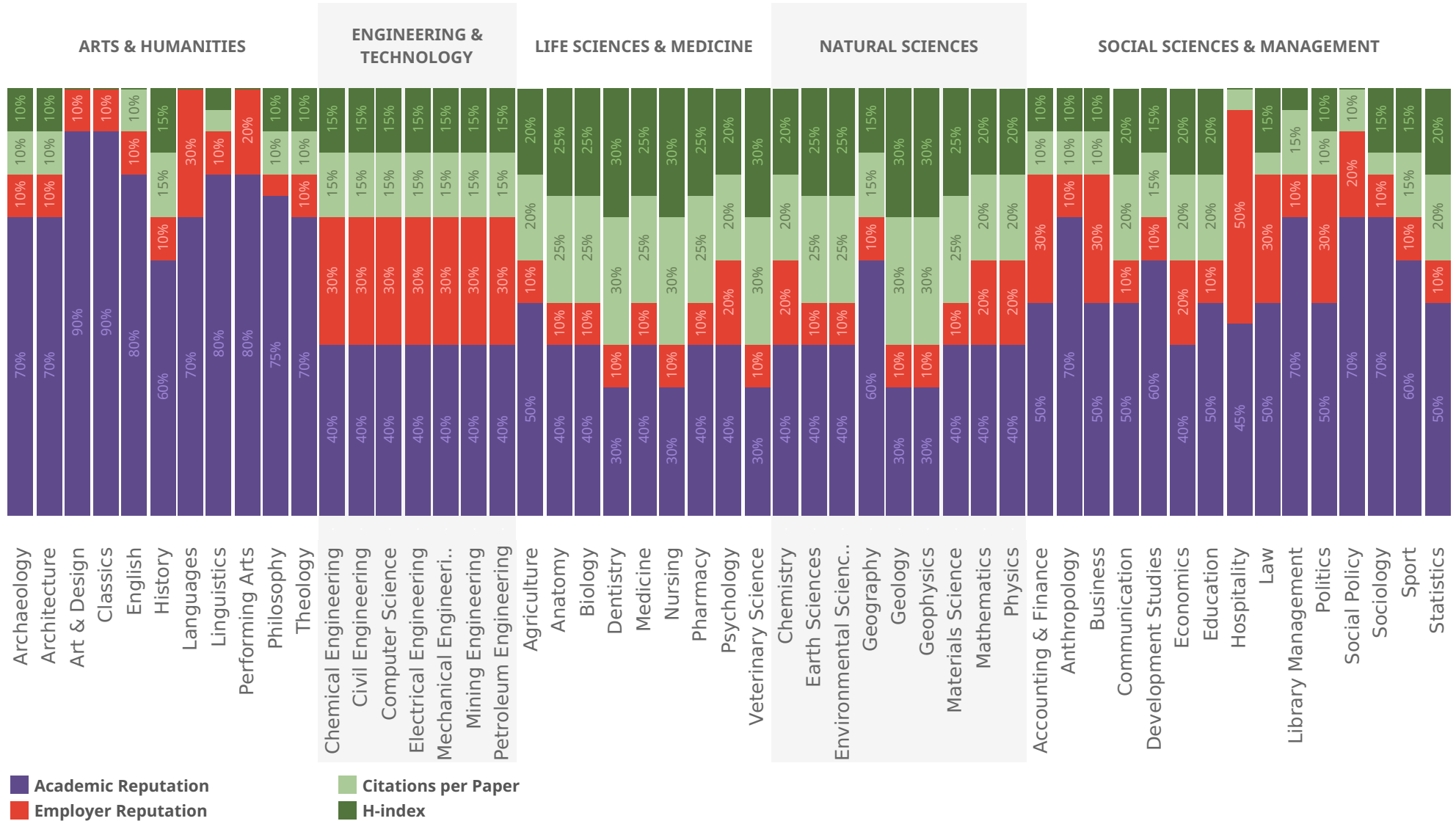
H-INDEX The h-index is an index that attempts to measure the stability of impact and quality of the work published by the institutions' scientists and scholars.

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

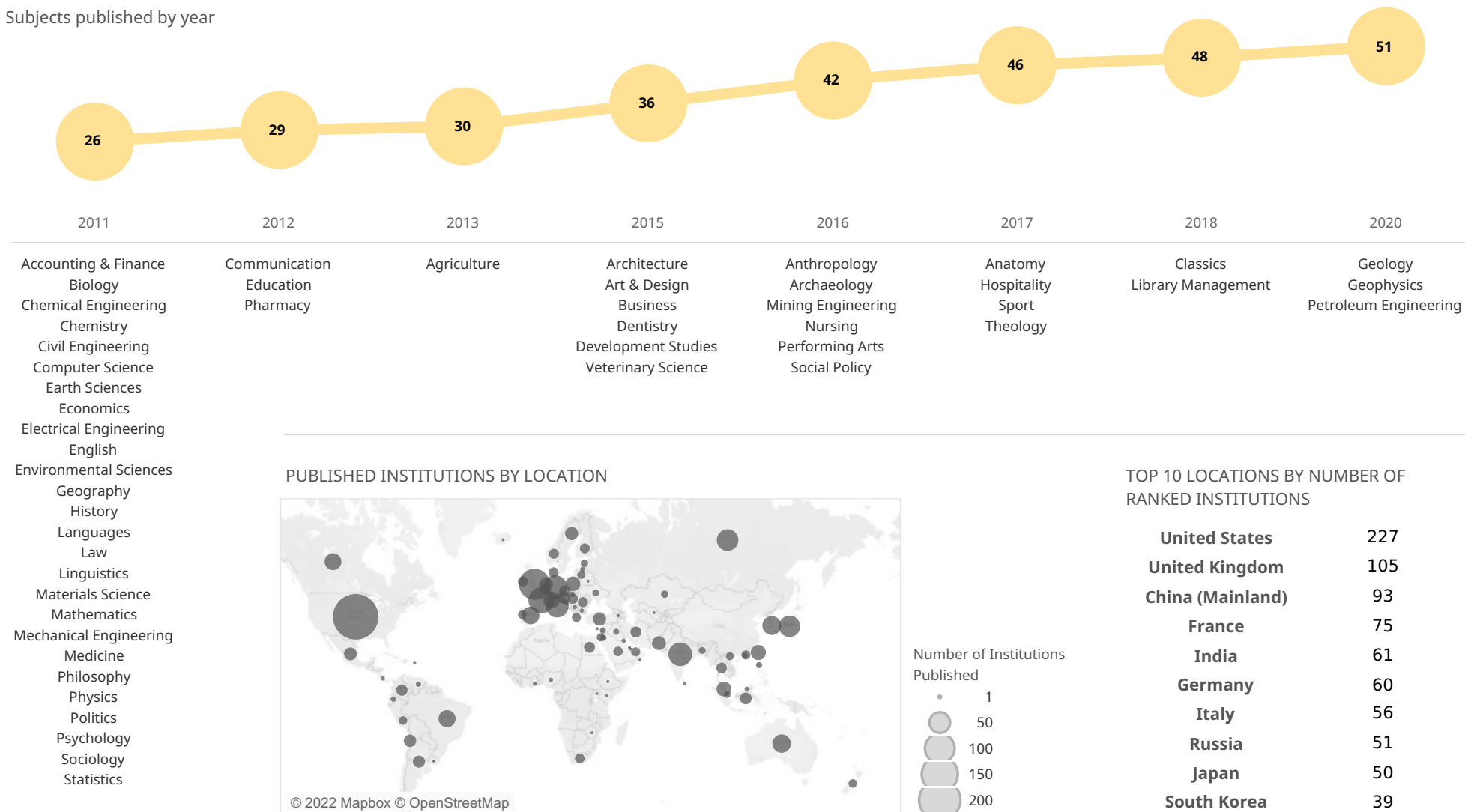
We use a variable approach to the weightings for the different subjects. The chart below provides details of the combinations used in the 2022 edition of the rankings.



2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

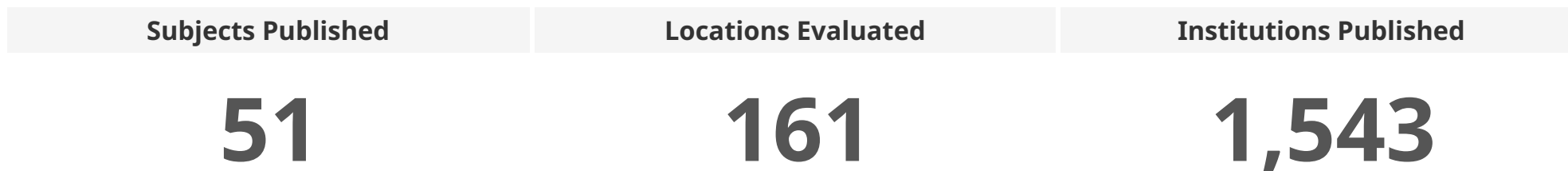
The **QS World University Rankings® by Subject** ranks the world's top universities in individual subject areas, covering 51 disciplines as of 2022. A list of the considered subjects, grouped by the year of first release, is presented below.

Subjects published by year



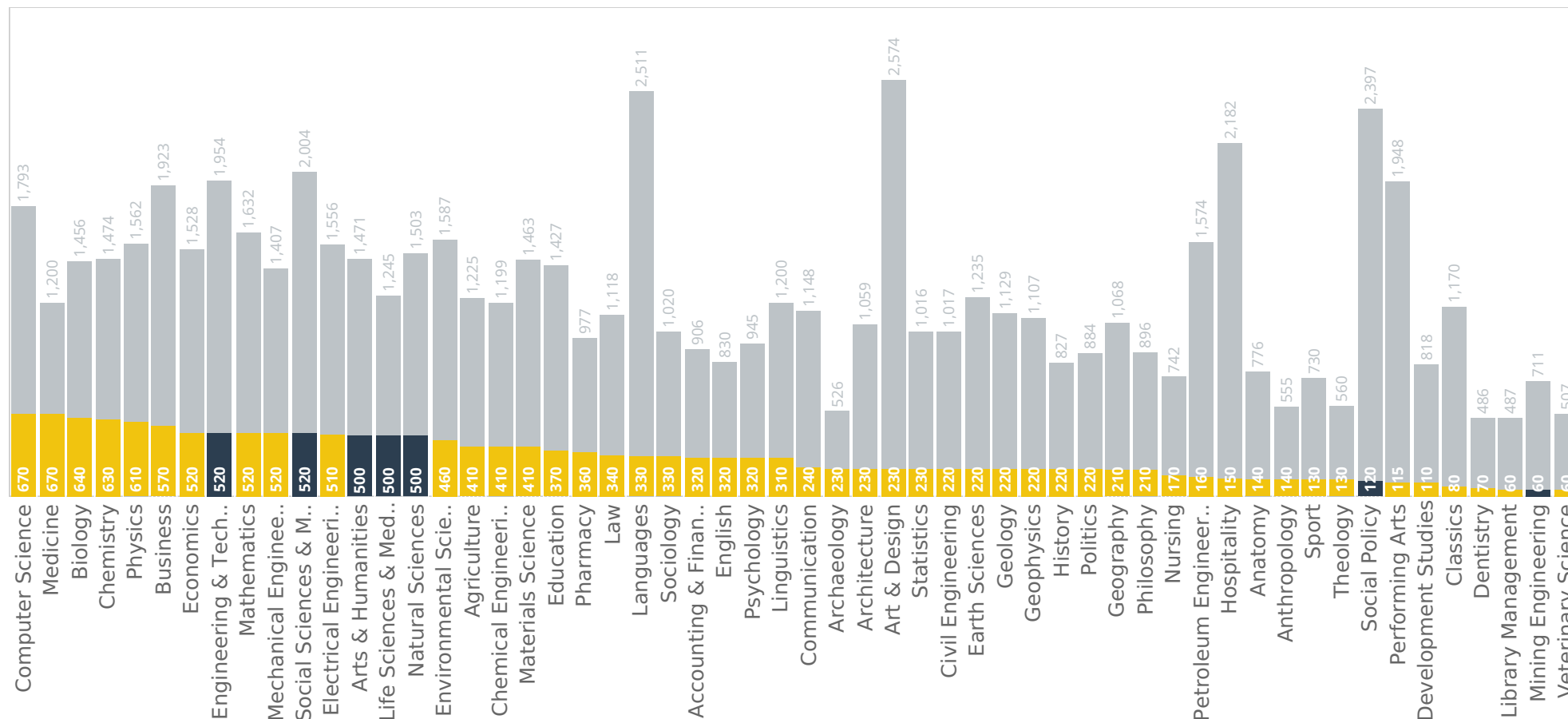
2022 QS WORLD UNIVERSITY RANKINGS BY SUBJECT

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



INSTITUTIONS ANALYSED AND PUBLISHED BY SUBJECT - YEAR 2022

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





QS conferences bring international leaders together to celebrate academic excellence and innovation in higher education.

01

QS MAPLE/QS EUROPE/QS AMERICAS/ QS APPLE

A global conference designed to create an inclusive platform for knowledge sharing, discussions and debate, professional networking and helps drives forward higher education in each region.

03

REIMAGINE EDUCATION CONFERENCE & AWARDS

A global conference and competition open to international innovators. The Reimagine Education Awards - 'Oscars' of Education - offers \$50,000 in funding to overall winners.

02

EDUDATA SUMMIT

A premium conference that fosters the sharing of latest trends and best practices and learn the plaudits and pitfalls on institutional data management and usage.

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.

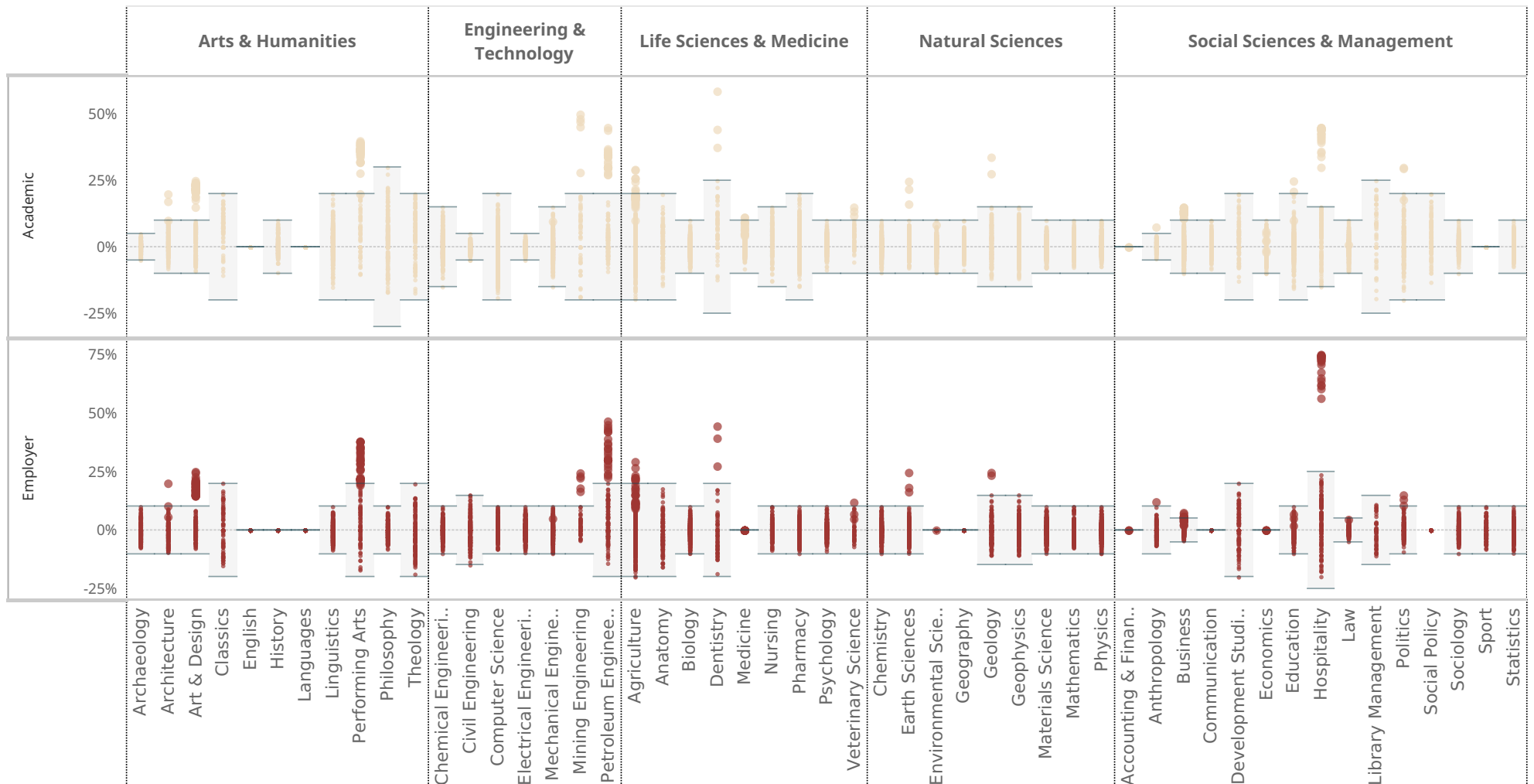
For more information, please visit
www.qs.com/solutions/events/higher-education-conferences



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

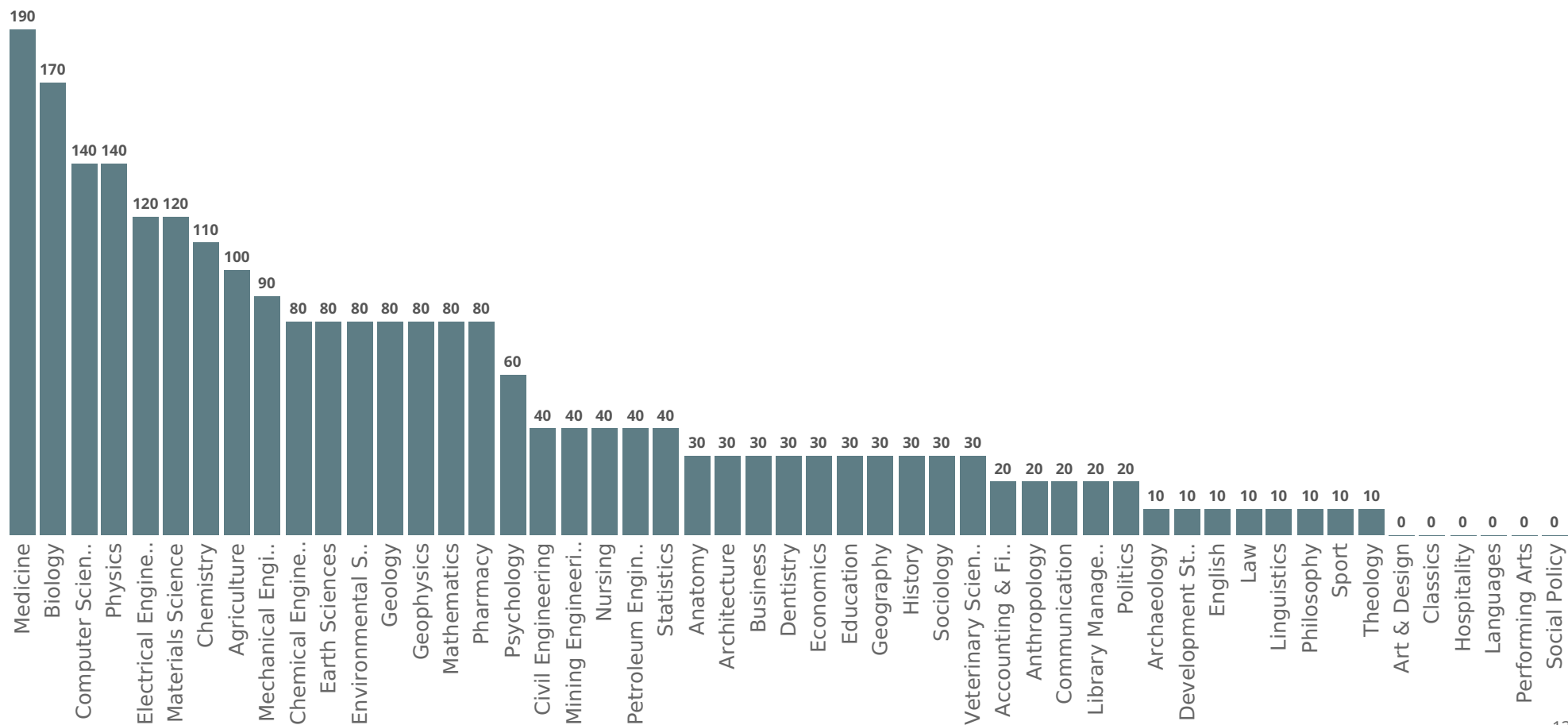
In order to feature in any discipline table, an institution must meet three simple prerequisites:

- 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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