

# 2023 Shanghai Ranking's Global Ranking of Academic Subjects

## Summary

On October 27, 2023, Shanghai Ranking Consultancy, the company that publishes the Academic Ranking of World Universities (ARWU), released the 2023 Global Ranking of Academic Subjects (GRAS). Overall, close to 5,000 universities were ranked and of those, more than 1,900 universities from 104 countries were published in this release across 55 subjects in five broad discipline areas. *The University of Saskatchewan (USask) was ranked in 23 of these subject areas, including two placements within the Top 100: 17 in Water Resources and 51-75 in Veterinary Sciences.* Other Top 200 placements were 101-150 in Agricultural Sciences, Energy Science & Engineering, Environmental Science & Engineering, and 151-200 in Atmospheric Science, Dentistry & Oral Sciences, and Earth Sciences.

# **Ranking Methodology**

For an institution to be included in any subject ranking, it needed to meet a threshold in terms of research publications during the period 2018-2022. Note that the threshold may be different for different subject areas. The rankings were then produced based on five weighted indicators: Research Output (Q1), Research Influence (CNCI), International Collaboration (IC), Research Quality (TOP), and International Academic Awards (AWARD). Different weights were allocated to the indicators for different subjects. For example, Q1 accounted for 23.8 percent in Chemistry, Physics and a number of other subject areas, but 48.4 percent in Finance, Public Administration, and Sociology. Depending on the subject area, between 50 and 500 universities were ranked.

Area	Indicator	Weight <sup>1</sup>	Source	
Research Output (Q1)	The number of papers published by an institution in an Academic Subject in journals with Q1 Journal Impact Factor Quartile during 2018-22.	23.8% - 48.4%	Web of Science and InCites	
Research Influence (CNCI)	Category Normalized Citation Impact (CNCI) is the ratio of citation of papers published by an institution in an Academic Subject relative to the average number of citations of papers in the same category during 2018-22.	5.9% - 31.3%	InCites	
International Collaboration (IC)	The percentage of papers with international collaboration authored by an institution in an Academic Subject during the period 2018-22.	2.4% - 6.3%	InCites	
Research Quality (TOP)	The number of papers published in Top Journals in an Academic Subject for an institution during the period 2018-22.	23.8% - 37.0%	InCites – note that the journals were identified through Shanghai Ranking's Academic Excellence Survey <sup>2</sup>	
International Academic Awards (AWARD)	The total number of staff of an institution winning a significant award in an Academic Subject since 1991.	0% - 29.4%	The awards were identified through Shanghai Ranking's Academic Excellence Survey <sup>2</sup>	

Notes:

1. Different weights were allocated to the indicators for different subjects.

2. The Academic Excellence Survey is a survey of deans, chairs, and department heads of the Top 100 universities. The survey asks respondents to identify top journals and awards in their subject areas.

For more information about GRAS methodology, please go to: <u>http://www.shanghairanking.com/methodology/gras/2023</u>

## **Rankings of the University of Saskatchewan**

USask was ranked in just under half of the subject areas (23 of 55), a similar outcome to last year. Overall ranking results continued to be very strong in Water Resources placing 17 globally (1 in Canada/U15), 51-75 globally in Veterinary Sciences (tied for 3 in Canada, 2 in U15), 101-150 globally in each of Agricultural Sciences (4 in Canada, 3 in U15), Energy



Science & Engineering (4 in Canada/U15), and Environmental Science & Engineering (tied for 6 in Canada/U15). Other very positive global outcomes included 151-200 in each of Atmospheric Science (tied for 6 in Canada, tied for 5 in U15), Dentistry & Oral Sciences (tied for 6 in Canada/U15), and Earth Sciences (tied for 6 in Canada/U15).

Additional positive global and/or national outcomes included 201-300 in each of Biomedical Engineering (tied for 4 in Canada/U15), Biotechnology (tied for 4 in Canada/U15), Chemical Engineering (tied for 7 in Canada, 7 in U15), Chemistry (tied for 5 in Canada/U15), Ecology (tied for 10 in Canada, tied for 5 in U15), Food Science & Technology (7 in Canada, 5 in U15), Law (tied for 11 in Canada, tied for 9 in U15), Materials Science & Engineering (tied for 4 in Canada/U15), and Nanoscience & Nanotechnology (tied for 4 in Canada/U15).

For Biomedical Engineering as well as Dentistry & Oral Sciences, these outcomes were new rankings after not being ranked previously. Education received a ranking again, jumping back in to 301-400 after falling out in the most recent year of the ranking. In the subject areas of Nursing and Pharmacy & Pharmaceutical Sciences, both were no longer ranked after being ranked in the prior year.

There was one new subject included in this year's ranking which was Textile Science & Engineering. No Canadian schools were ranked in this new subject.

The full table of all the results, including placements within Canada and the U15, follows on the next page.



#### USask Rankings in 2023 Global Ranking of Academic Subjects (GRAS)

Subject Area	World	Canada	U15	Subject Area	World	Canada	U15
Engineering			•	Medical Sciences			
Aerospace Engineering	50+	1+	1+	Clinical Medicine	500+	16+	15
Automation & Control	200+	8+	5+	Dentistry & Oral Sciences	151-200	6*	6*
Biomedical Engineering	201-300	4*	4*	Medical Technology	301-400	13	12
Biotechnology	201-300	4*	4*	Nursing	300+	12+	10+
Chemical Engineering	201-300	7*	7	Pharmacy & Pharmaceutical Sciences	500+	14+	12+
Civil Engineering	300+	11+	7+	Public Health	500+	17+	15
Computer Science & Engineering	301-400	18*	8*	Natural Sciences	•		
Electrical & Electronic Engineering	401-500	21*	10*	Atmospheric Science	151-200	6*	5*
Energy Science & Engineering	101-150	4	4	Chemistry	201-300	5*	5*
Environmental Science & Engineering	101-150	6*	6*	Earth Sciences	151-200	6*	6*
Food Science & Technology	201-300	7	5	Ecology	201-300	10*	5*
Instruments Science & Technology	300+	8+	7+	Geography	300+	17+	11+
Marine/Ocean Engineering	50+	1+	0+	Mathematics	500+	12+	9+
Materials Science & Engineering	201-300	4*	4*	Oceanography	200+	11+	8+
Mechanical Engineering	400+	14+	10+	Physics	500+	12+	8+
Metallurgical Engineering	200+	5+	5+	Social Sciences			
Mining & Mineral Engineering	100+	7+	6+	Business Administration	400+	18+	10+
Nanoscience & Nanotechnology	201-300	4*	4*	Communication	300+	11+	7+
Remote Sensing	100+	3+	2+	Economics	401-500	18*	14
Telecommunication Engineering	300+	24+	10+	Education	301-400	16*	14
Textile Science & Engineering	50+	0+	0+	Finance	200+	9+	8+
Transportation Science & Technology	200+	16+	8+	Hospitality & Tourism Management	300+	9+	4+
Water Resources	17	1	1	Law	201-300	11*	9*
Life Sciences			Library & Information Science	100+	5+	5+	
Agricultural Sciences	101-150	4	3	Management	500+	23+	15
Biological Sciences	401-500	14*	12*	Political Sciences	400+	23+	13+
Human Biological Sciences	500+	16+	13+	Psychology	500+	27+	15
Veterinary Sciences	51-75	3*	2*	Public Administration	200+	8+	5+
				Sociology	200+	8+	7+
				Statistics	200+	7+	6+

Notes:

1. Depending on the subject area, between 50 and 500 universities were ranked.

2. Light grey fonts indicate that the USask was not ranked in the subject area, while XXX+ universities were ranked.

3. An asterisk (\*) indicates a tie.

For more information, please visit Assessment and Analytics