

2022 ShanghaiRanking's Global Ranking of Academic Subjects

Summary

On July 19, 2022, ShanghaiRanking Consultancy, the company that publishes the Academic Ranking of World Universities (ARWU, aka the Shanghai Ranking), released the 2022 Global Ranking of Academic Subjects (GRAS). Overall, more than 5,000 universities were ranked and of those, more than 1,800 universities from 96 countries were published in this release across 54 subjects in five broad discipline areas. ***The University of Saskatchewan (USask) was ranked in 22 of these subject areas, including three placements within the top 100: 23 in Water Resources, 51-75 in Veterinary Sciences, and 76-100 in Environmental Science & Engineering.***

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 2016-2020. 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 ¹	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 2016-20.	23.8% - 62.5%	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 2016-20.	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 2016-20.	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 2016-20.	0% - 37%	InCites – note that the journals were identified through ShanghaiRanking's Academic Excellence Survey ²
International Academic Awards (AWARD)	The total number of staff of an institution winning a significant award in an Academic Subject since 1981.	0% - 29.4%	The awards were identified through ShanghaiRanking's Academic Excellence Survey ²

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:

<https://www.shanghairanking.com/methodology/gras/2022>

Rankings of the University of Saskatchewan

USask was ranked in just under half of the subject areas (22 of 54), a drop of 6 subjects as compared to last year. Overall ranking results continued to be very strong in Water Resources (23 globally, 1 in Canada), Veterinary Sciences (51-75 globally, 4 in Canada), and Environmental Science & Engineering (76-100 globally, 6 in Canada). Other very positive global

outcomes included rankings of 101-150 in Agricultural Sciences (tied for 4 in Canada), as well as 151-200 in each of Energy Science & Engineering (tied for 4 in Canada), Earth Sciences (tied for 7 in Canada), and Law (tied for 9 in Canada). Additional notable global rankings outcomes included 201-300 in each of Atmospheric Science, Chemical Engineering, Ecology, Food Science & Technology, Materials Science & Engineering, Medical Technology, and Nursing.

There were no changes in the subject complement included in this year's ranking exercise.

USask Rankings in 2022 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+	17+	15
Automation & Control	200+	7+	6+	Dentistry & Oral Sciences	300+	8+	8+
Biomedical Engineering	300+	10+	10+	Medical Technology	201-300	11*	10*
Biotechnology	301-400	9*	9*	Nursing	201-300	10*	9*
Chemical Engineering	201-300	6*	6*	Pharmacy & Pharmaceutical Sciences	401-500	14*	13
Civil Engineering	300+	16+	10+	Public Health	500+	21+	15
Computer Science & Engineering	301-400	15*	9*	Natural Sciences			
Electrical & Electronic Engineering	401-500	24*	12*	Atmospheric Science	201-300	9*	7*
Energy Science & Engineering	151-200	4*	4*	Chemistry	301-400	8*	8*
Environmental Science & Engineering	76-100	6	6	Earth Sciences	151-200	7*	6*
Food Science & Technology	201-300	8	6	Ecology	201-300	10*	5*
Instruments Science & Technology	300+	8+	5+	Geography	300+	18+	11+
Marine/Ocean Engineering	50+	1+	0+	Mathematics	500+	16+	11+
Materials Science & Engineering	201-300	4*	4*	Oceanography	200+	10+	7+
Mechanical Engineering	400+	20+	15	Physics	500+	12+	8+
Metallurgical Engineering	200+	6+	6+	Social Sciences			
Mining & Mineral Engineering	100+	9+	7+	Business Administration	400+	21+	13+
Nanoscience & Nanotechnology	301-400	8*	8*	Communication	300+	15+	9+
Remote Sensing	100+	6+	3+	Economics	301-400	15*	13
Telecommunication Engineering	300+	21+	11+	Education	500+	20+	13+
Transportation Science & Technology	200+	13+	7+	Finance	200+	10+	8+
Water Resources	23	1	1	Hospitality & Tourism Management	300+	15+	8+
Life Sciences				Law	151-200	9*	7*
Agricultural Sciences	101-150	4*	3*	Library & Information Science	100+	5+	5+
Biological Sciences	401-500	13*	12*	Management	500+	23+	15
Human Biological Sciences	500+	17+	13+	Political Sciences	400+	23+	13+
Veterinary Sciences	51-75	4	3	Psychology	500+	27+	15
				Public Administration	200+	6+	4+
				Sociology	200+	7+	6+
				Statistics	200+	9+	7+

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, visit www.usask.ca/ipa