

2024 Shanghai Ranking's Global Ranking of Academic Subjects

Summary

On November 11, 2024, Shanghai Ranking Consultancy, the company that publishes the Academic Ranking of World Universities (ARWU), released the 2024 Global Ranking of Academic Subjects (GRAS). Overall, close to 5,000 universities were ranked and of those, more than 1,900 universities from 96 countries were published in this release across 55 subjects in five broad discipline areas. The University of Saskatchewan (USask) was ranked in 25 of these subject areas, including four placements within the Top 100: 29 in Water Resources, 51-75 in Agricultural Sciences, and 76-100 in each of Earth Sciences and Veterinary Sciences. Other Top 200 placements included 101-150 in Atmospheric Science, Energy Science & Engineering, Environmental Science & Engineering, and Law, as well as 151-200 in each of Materials Science & Engineering and Dentistry & Oral Sciences.

Ranking Methodology

These subject rankings underwent a methodology change since the prior year, with the addition of 4 new indicators within a category called World-Class Faculty. The rankings are now produced based on nine weighted indicators rather than five: four sit within World-Class Faculty (Laureate, HCR, Editor, and Leadership), two within World-Class Output (TJ and Award), High Quality Research (Q1), Research Impact (CNCI), and International Collaboration (IC). Different weights continue to be allocated to the indicators for different subjects. For example, Q1 accounted for 18.2 percent in each of Chemistry and Clinical Medicine, but 30.3 percent in each of Civil Engineering and Veterinary Sciences.

For an institution to be included in any subject ranking, it needed to meet a threshold in terms of research publications during the period 2019-2023. Note that the threshold may be different for different subject areas. Depending on the subject area, between 50 and 500 universities were ranked.

Area	Indicator	Weight ¹	Source
World-Class Faculty (Laureate, HCR, Editor, Leadership)	Laureate - number of full-time faculty members employed by an institution as of April 2024 who have received significant international academic awards within an Academic Subject.	0% - 12.0%	The awards were identified through Shanghai Ranking's Academic Excellence Survey ²
	HCR - Highly Cited Researchers (HCR) are faculty members at an institution who have demonstrated significant influence in their Academic Subjects, as selected by Clarivate.	0% - 15.4%	Clarivate's HCR List as issued in January 2024
	Editor - number of faculty members employed by an institution who currently serve as chief editors of international journals indexed by SCIE, SSCI and AHCI.	4.7% - 23.1%	2021 Journal Citation Report (JCR) by Clarivate as of December 2023
	Leadership - number of faculty members employed by an institution who currently hold leadership and senior executive positions in key international academic organizations as of April 2024.	0% – 5.9%	The key international academic organizations were identified through Shanghai Ranking's Academic Excellence Survey ²
World-Class Output (TJ and Award)	7J – Top Journal Papers (TJ) is the number of papers published in Top Journals or Top Conferences within an Academic Subject by an institution during the period 2019-23.	10.0% - 34.5%	InCites – note that the journals and conferences were identified through Shanghai Ranking's Academic Excellence Survey ²
	Award - International Academic Awards (Award) refers to the total number of the staff of an institution winning a significant award in an Academic Subject since 1991.	0% – 20.4%	The awards were identified through Shanghai Ranking's Academic Excellence Survey ²
High Quality Research (Q1)	Q1 - The number of papers published by an institution in an Academic Subject within journals ranked in Q1 based on the Journal Impact Factor Quartile during 2019-23.	17.5% - 40.0%	InCites database
Research Impact (CNCI)	CNCI - Category Normalized Citation Impact (CNCI) is the ratio of citations of papers published by an institution in an Academic Subject relative to the average number of citations of papers in the same category, year, and type, during 2019-23.	8.8% - 20.0%	InCites database
International Collaboration (IC)	IC - The percentage of papers with international collaboration (IC) authored by an institution in an Academic Subject during the period 2019-23.	2.0% - 8.0%	InCites database



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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, international awards, as well as key international organizations, each within their respective subject areas.

For more information about GRAS methodology, please go to:

https://www.shanghairanking.com/methodology/gras/2024

Rankings of the University of Saskatchewan

USask was ranked in just under half of the subject areas (25 of 55), a small improvement over last year (ranked in 23 subjects). Overall ranking results continued to be very strong with four outcomes within the Top 100 globally including placing 29 in Water Resources (2 in Canada/U15), 51-75 in Agricultural Sciences (3 in Canada, 2 in U15), and 76-100 in each of Earth Sciences (3 in Canada/U15) and Veterinary Sciences (5 in Canada, 3 in U15).

There were six other Top 200 global placements including 101-150 in each of Atmospheric Sciences (tied for 3 in Canada, tied for 2 in U15), Energy Science & Engineering (tied for 4 in Canada, tied for 3 in U15), Environmental Science & Engineering (tied for 5 in Canada/U15), Law (tied for 5 in Canada, tied for 4 in U15), and 151-200 in both Materials Science & Engineering (tied for 4 in Canada/U15) and Dentistry & Oral Sciences (8 in Canada/U15).

Additional positive global and/or national outcomes included 201-300 in each of Biotechnology (tied for 8 in Canada, tied for 7 in U15), Chemistry (tied for 6 in Canada/U15), Food Science & Technology (tied for 7 in Canada, tied for 5 in U15), and Nanoscience & Nanotechnology (tied for 6 in Canada/U15).

USask received subject rankings for the following subjects after not being ranked in the prior year: Public Health (301-400), Clinical Medicine (401-500), Pharmacy and Pharmaceutical Sciences (401-500), and Psychology (401-500). No rankings were received this year in either Biomedical Engineering or Economics after being ranked in 2023.

There were no new subjects added to this year's subject ranking.

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



USask Rankings in 2024 Global Ranking of Academic Subjects (GRAS)

Subject Area	World	Canada	U15	Subject Area	World	Canad	U15	
Engineering				Medical Sciences				
Aerospace Engineering	50+	50+ 2+ 1+ Clinical Medicine		Clinical Medicine	401-500	16	15	
Automation & Control	200+	8+	5+	Dentistry & Oral Sciences	151-200	8	8	
Biomedical Engineering	300+	8+	8+	Medical Technology	301-400	12*	11*	
Biotechnology	201-300	8*	7*	Nursing	300+	12+	10+	
Chemical Engineering	301-400	10*	9*	Pharmacy & Pharmaceutical Sciences	401-500	10*	10*	
Civil Engineering	300+	15+	10+	Public Health	301-400	16*	14*	
Computer Science & Engineering	301-400	16*	10*	Natural Sciences				
Electrical & Electronic Engineering	301-400	18*	10*	Atmospheric Science	101-150	3*	2*	
Energy Science & Engineering	101-150	4*	3*	Chemistry	201-300	6*	6*	
Environmental Science & Engineering	101-150	5*	5*	Earth Sciences	76-100	3	3	
Food Science & Technology	201-300	7*	5*	Ecology	301-400	21*	11*	
Instruments Science & Technology	300+	11+	8+	Geography	300+	17+	11+	
Marine/Ocean Engineering	50+	0+	0+	Mathematics	500+	16+	11+	
Materials Science & Engineering	151-200	4*	4*	Oceanography	200+	11+	8+	
Mechanical Engineering	400+	16+	11+	Physics	500+	13+	9+	
Metallurgical Engineering	200+	5+	5+	Social Sciences				
Mining & Mineral Engineering	100+	8+	6+	Business Administration	400+	17+	10+	
Nanoscience & Nanotechnology	201-300	6*	6*	Communication	200+	7+	4+	
Remote Sensing	100+	3+	3+	Economics	500+	16+	11+	
Telecommunication Engineering	300+	25+	11+	Education	401-500	17*	14	
Textile Science & Engineering	50+	0+	0+	Finance	200+	8+	7+	
Transportation Science & Technology	200+	12+	7+	Hospitality & Tourism Management	200+	10+	6+	
Water Resources	29	2	2	Law	101-150	5*	4*	
Life Sciences			Library & Information Science	100+	3+	3+		
Agricultural Sciences	51-75	3	2	Management	500+	24+	15	
Biological Sciences	401-500	16*	13*	Political Sciences	400+	22+	13+	
Human Biological Sciences	500+	19+	15	Psychology	401-500	25*	15	
Veterinary Sciences	76-100	5	3	Public Administration	200+	8+	5+	
				Sociology	200+	9+	7+	
				Statistics	200+	9+	8+	

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.
- An asterisk (*) indicates a tie.

For more information, please contact <u>Assessment and Analytics</u> in the Office of the Provost and VP Academic.