



# University Rankings

Never Stand Still

Research Analysis, Performance and Profile Office

# Why university rankings are important

- Now recognised as a permanent feature of the higher education sector
- Ranks have an increasing profile in a global market
- University rankings and associated consulting is a growth industry
  - Increased degree of commercialisation and competition between ranking organisations
  - Institutions and governments attempting to address perceived deficiencies of the existing rankings by developing alternative approaches.
- Rankings can be a opportunity to assist with marketing and reputation building
  - “Good news” stories
  - Significant influence student recruitment (particularly internationally?)
- Provide support to claims around research and teaching strengths and provide benchmarking data
- Rankings do attract significant criticism and controversy



# Rankings

Red – important

Orange – not so important

Blue – not applicable/not important

## QS Rankings

World University Rankings

Subject Rankings

QS Stars

By Faculty

Asia

Latin America

Best Student Cities

BRICS

Top 50 Under 50

## THE Rankings

World University Rankings

World University Rankings (Field)

World Reputation Rankings

BRICS and Emerging Economics

Asia University Rankings

100 Under 50

## Shanghai Jiao Tong

Academic Ranking of World Universities (ARWU)

ARWU by Field

ARWU by Subject

Greater China

Macedonian HEI

## Others

Leiden

Taiwan (HEEACT)

Scimago

Nature

U-Multirank

G-factor

Webometrics

Good Universities Guide

ERA



# QS World University Rankings Methodology



Criteria	Weighting	Source of Data	Sources
Academic Reputation	40%	Academic survey	Subscribers to <a href="http://www.worldscientific.com">www.worldscientific.com</a> Academic contacts on <a href="http://www.mardev.com">www.mardev.com</a> database Volunteers Institution supplied lists (400 nominations)
Employer Reputation	10%	Employer survey	QS database of employers Institution supplied lists (400 nominations)
Citations per Faculty FTE	20%	Scopus citation count Data request checked against published data	Indexed in SciVerse Scopus Faculty not split into teaching/research Excludes self citations
Students per Faculty FTE	20%	Data request checked against published data	The staff/student ratio Faculty not split into teaching/research EFTSL student numbers
International Staff	5%	Data request checked against published data	
International Students	5%	Data request checked against published data	



# Times Higher Education Methodology

Area	Criteria	Weight	Source of Data
Teaching (30%)			
Teaching reputation	Invitation-only academic reputation survey	15%	Survey
Academic staff to student ratio		4.5%	Supplied by institution
Ratio of PhD/B degrees	Counts degrees awards for one year.	2.25%	Supplied by institution
Ratio of PhD/ academic staff	Normalised by subject.	6%	Supplied by institution
Ratio of income/ academic staff	Adjusted for purchasing power parity	2.25%	Supplied by institution
Research (30%)			
Academic reputation		18%	Survey
Research income/staff	Research income, scaled against staff numbers and normalised for purchasing power parity and subject mix.	6%	Supplied by institution Normalised for subject
Number of papers/staff	Number of papers, scaled for university's total size and normalised for subject.	6%	Supplied by institution Citation database
Citations (30%)	Number of citations, normalised for subject. Citation impact (normalised average citations per paper) Counted over a five year period.	30%	Web of Science database
Industry income (2.5%)	Research income from industry, scaled against academic staff numbers	2.5%	Supplied by institution
International outlook (7.5%)			
Ratio of int. students		2.5%	Supplied by institution
Ratio of int. staff		2.5%	Supplied by institution
International collaboration	The proportion of a university's total research journal publications have at least one international co-author. Normalised by subject.	2.5%	Citation database

# Shanghai Jiao Tong (ARWU) Methodology – Indicators & Weights



Criteria	Indicator	Weight
Quality of Education	Alumni of an institution winning Nobel Prizes and Fields Medals	10%
Quality of Faculty	Staff of an institution winning Nobel Prizes and Fields Medals	20%
	Highly cited researchers in 21 broad subject categories	20%
Research Output	Papers published in Nature and Science	20%
	Papers indexed in Science Citation Index-expanded and Social Science Citation Index	20%
Per Capita Performance	Per capita academic performance of an institution	10%

## Key factors impacting rankings

### Staff

- Staff numbers (e.g student/staff ratio, per capita performance)
- High performers

### Research publications

- Number of publications
- Quality of publications

### Income

- Institutional, research and industry income

### Reputation

- Academic, employer and teaching reputation

### Internationalisation

- International staff and students
- International collaborations

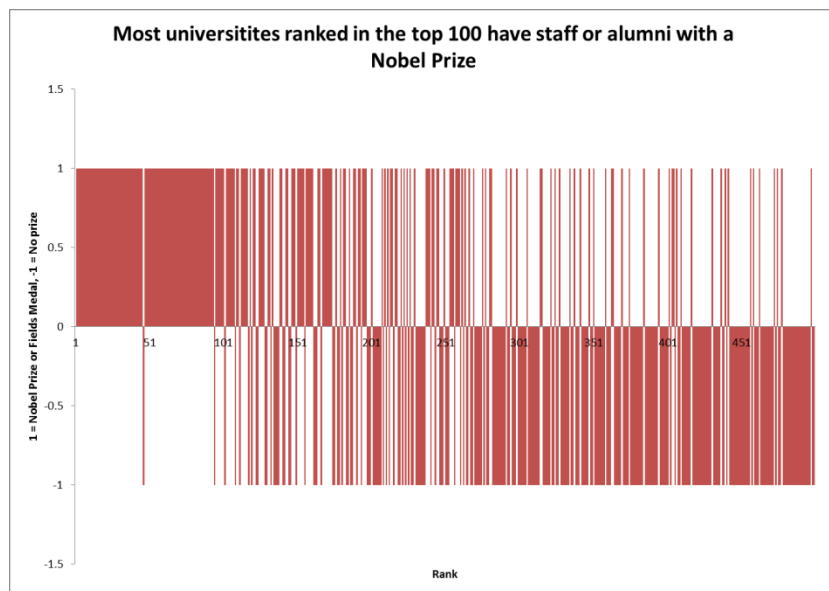
# Surveys and reputation

- “Reputation” as assessed by surveys has a role in both the QS and Times Higher Education rankings
- UNSW’s (international) reputation is **absolutely critical** for success in the QS and Times Higher Education rankings
- QS Academic survey participants can self nominate or be nominated by UNSW
  - Academics and university administrators
  - Employers
- Looking for nominations of employers (international) that hire UNSW graduates
  - Alumni?
  - Benefactors?
  - Other contacts?



# Impact of Nobel Laureates

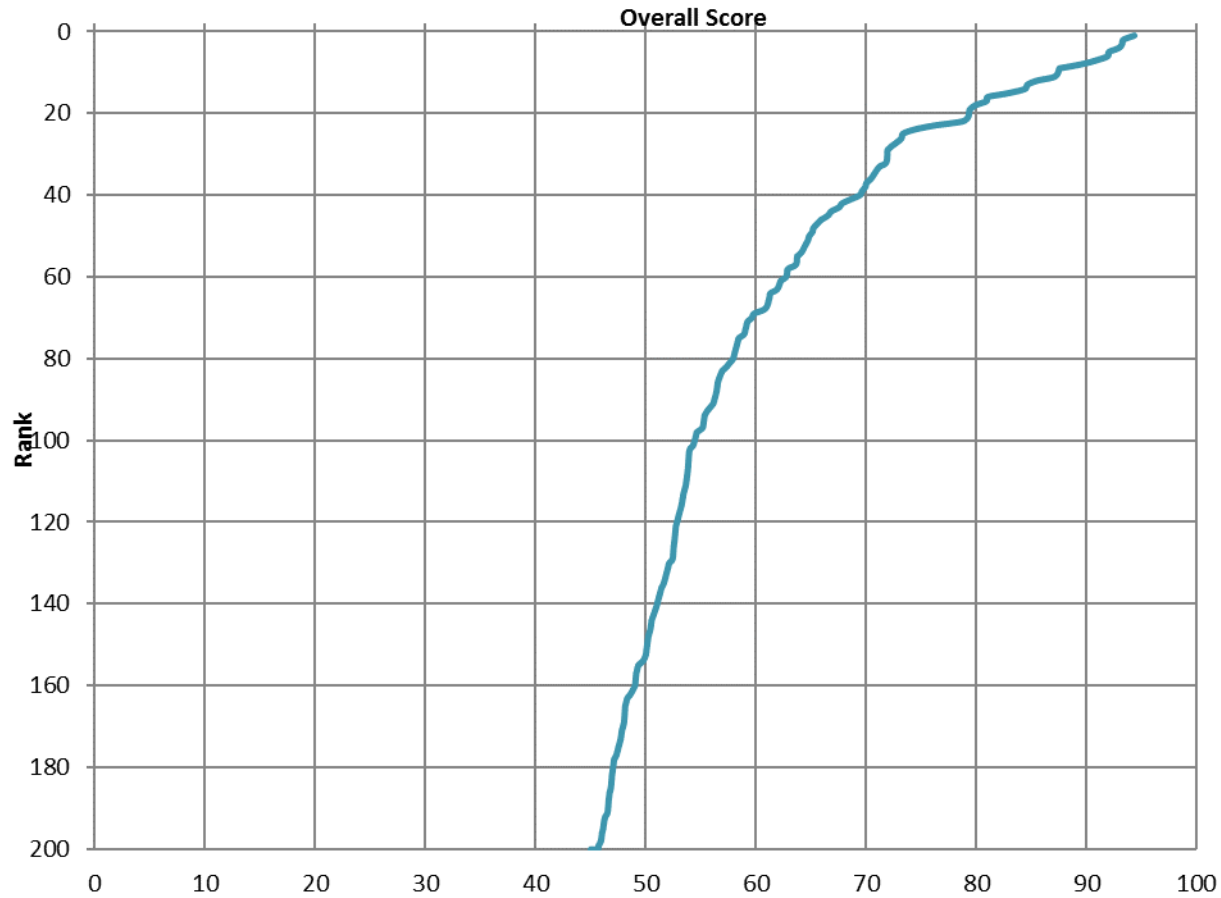
- If UNSW had a Nobel Prize winner on staff we would rank at about 95 (alongside UWA and USYD)
- Only 2 on the top 100 universities do not have a Nobel Prize winner on staff or alumni (Texas A&M University, University of California, Davis) both of which are exceptionally strong all other indicators.



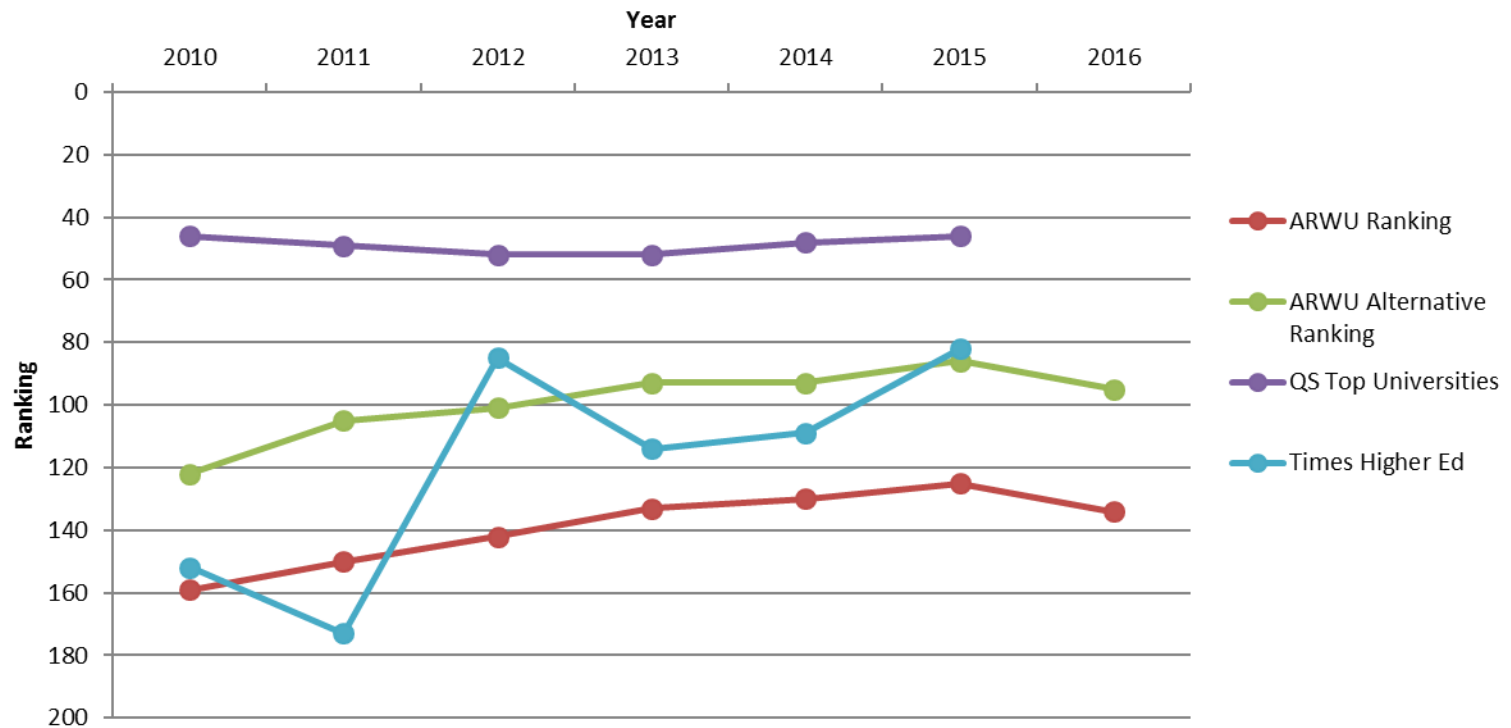
	Nobel Prize Winners
ANU	Brian Schmidt John C Harsanyi
Melbourne	Elizabeth Blackburn Peter Doherty Sir John Carew Eccles Sire Frank Macfarlane Burnet
UWA	Barry Marshall
UQ	Peter Doherty
USYD	John C Harsanyi Sir John Cornforth
UNSW	-
Adelaide	J Robin Warren Howard Florey Sir William Henry Bragg and Sir William Lawrence Bragg
Monash	-

# Times Higher Education

## Relationship between overall score and rank

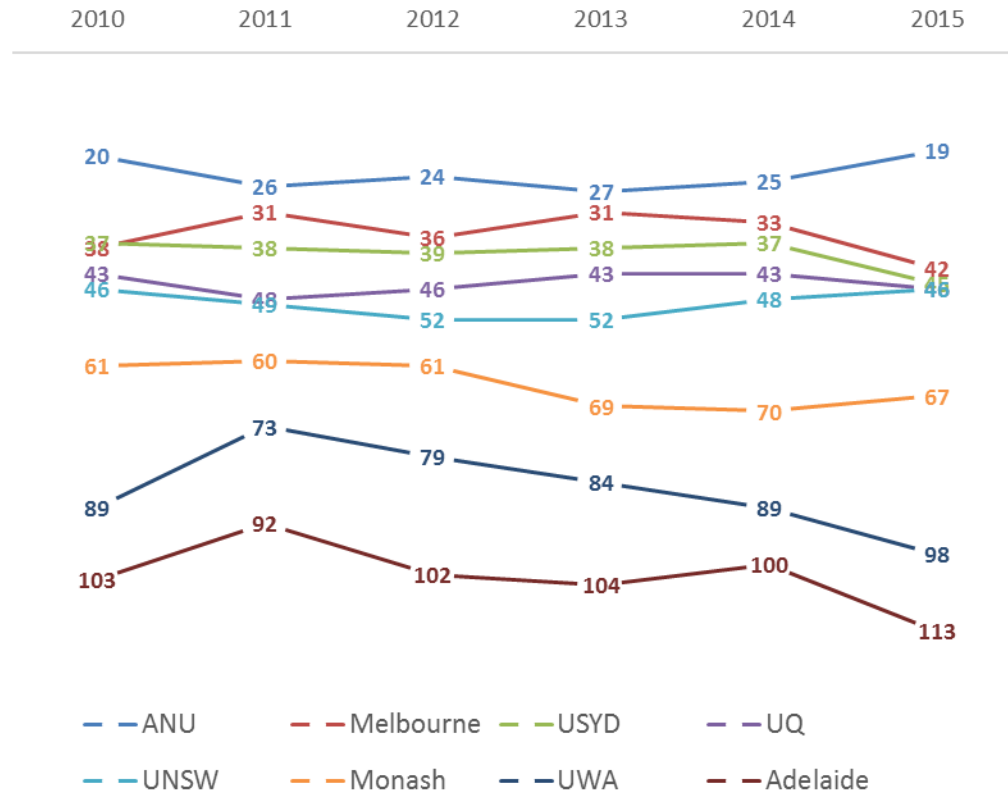


# UNSW's position in the world rankings



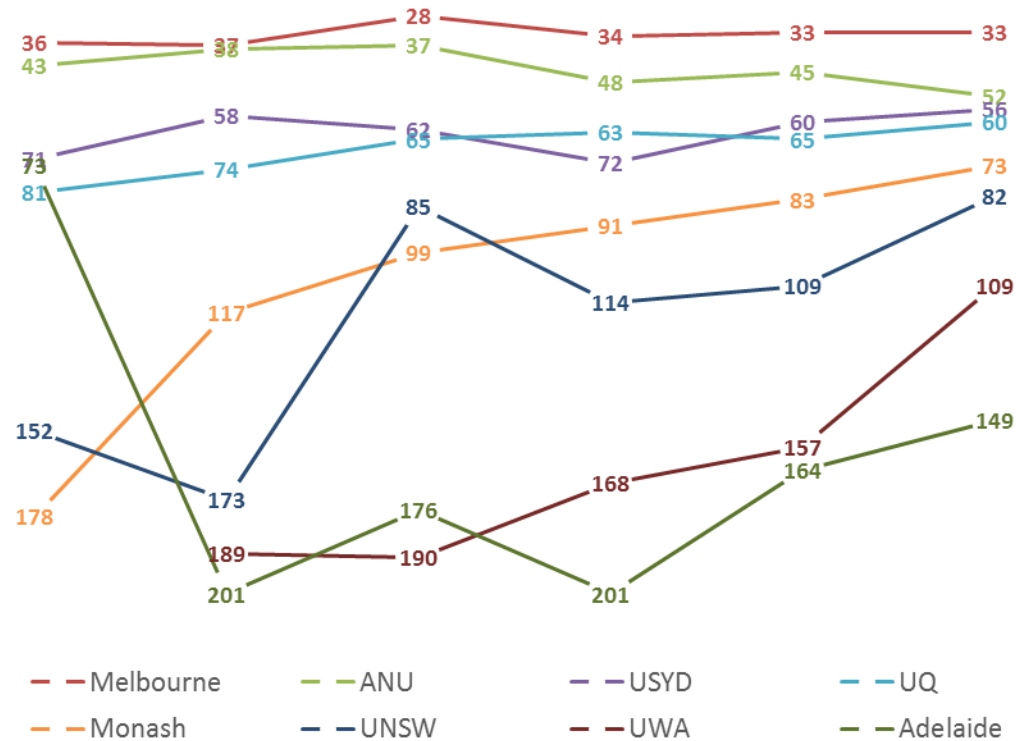
	2011	2012	2013	2014	2015	2016
Shanghai Jiao Tong (ARWU)	150	142	133	130	125	134
Times Higher Education/Thomson Reuters	173	85	114	109	82	
QS World University Ranking	49	52	52	48	46	

# QS World University Rankings – Go8

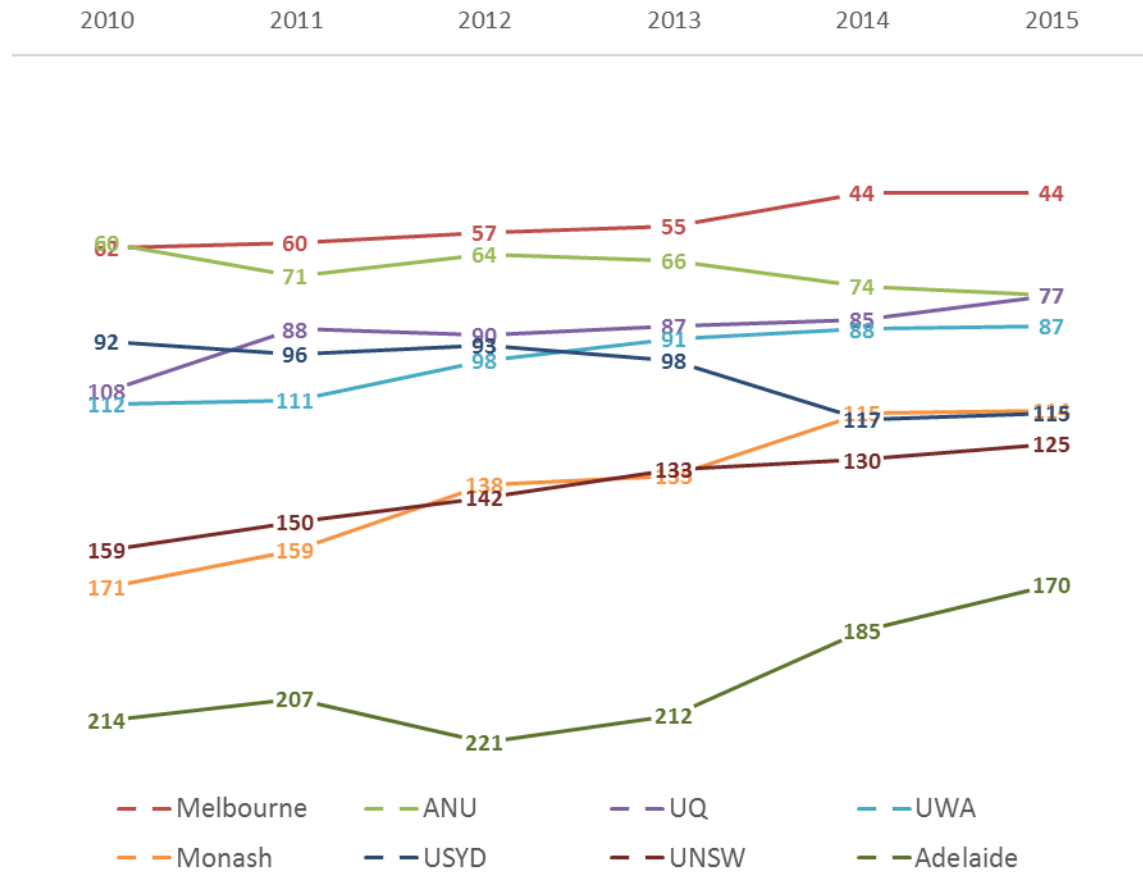


# THE World University Rankings – Go8

2010 2011 2012 2013 2014 2015



# ARWU Rankings – Go8



# Subject Rankings

- QS Subject Rankings covering 42 subjects as of 2016.
- THE publishes subject rankings covering 6 broad areas
  - Physical Sciences
  - Engineering and Technology
  - Social Sciences
  - Life Sciences
  - Arts and Humanities
  - Clinical, pre-clinical and health
- ARWU
  - Field Ranking covering 5 broad fields of research
    - Natural Sciences and Mathematics
    - Engineering/Technology and Computer Sciences
    - Life and Agriculture Sciences
    - Clinical Medicine and Pharmacy
    - Social Science
  - Subject Rankings covering Mathematics, Physics, Chemistry, Computer Science and Economics/Business
  - New Subject Rankings covering Engineering disciplines
    - Chemical Engineering, Civil Engineering, Electrical and Electronic Engineering, Energy Science and Engineering, Environmental Science and Engineering, Amterials Science and Engineering and Mechanical Engineering



## UNSW in Subject Rankings

### THE Subject Rankings by Subject area – Go8 in 2015

	UNSW	ANU	Adelaide	Melbourne	Monash	UQ	USYD	UWA
Arts and Humanities		43		38			29	
Clinical, Pre-clinical and Health	94			15	35	43	33	
Engineering and Technology	68	90	95	56	53	54	73	
Life Sciences	71	28		36		32	65	60
Physical Sciences	96	51		65				
Social Sciences	86	27		22	76	90	52	





# QS Rankings By Subject UNSW 2011-2016

UNSW Faculty	Subject Area	2011	2012	2013	2014	2015	2016	Change 2015-2016
Art & Design	Art & Design					25	29	4 ↓
Arts & Social Sciences	Anthropology						97	New
	Communication & Media Studies		49	39	53	49	40	↑ 9
	Development Studies					56	63	7 ↓
	Education		30	19	26	41	48	7 ↓
	English Language & Literature	61	79	47	41	46	52	6 ↓
	History			65	68	60	66	6 ↓
	Linguistics	93	116	110	104	121	77	↑ 44
	Modern Languages	40	125	79	180	94	73	↑ 21
	Philosophy	28	71	68	145	120	108	↑ 12
	Politics & International Studies	43	47	59	57	92	100	8 ↓
Sociology	34	50	69	101	70	58	↑ 12	
Social Policy & Administration						38	New	
Built Environment	Architecture & Built Environment					22	19	↑ 3
Business	Accounting & Finance	32	23	12	10	12	13	1 ↓
	Business & Management					19	24	5 ↓
	Economics & Econometrics	32	44	27	45	45	38	↑ 7
Business / Engineering	Computer Science & Info Systems	42	40	29	29	35	35	0
Engineering	Engineering - Chemical	30	23	31	46	28	33	5 ↓
	Engineering - Civil & Structural	23	17	15	18	14	16	2 ↓
	Engineering - Electrical & Electronic	34	36	44	33	38	43	5 ↓
	Engineering - Mechanical	46	46	37	37	37	34	↑ 3
	Engineering - Mineral & Mining						16	New
Law	Law	29	30	12	14	15	13	↑ 2
Medicine	Medicine	50	69	37	29	43	46	3 ↓
	Pharmacy & Pharmacology		35	22	11	74	65	↑ 9
Science	Biological Sciences	54	75	62	50	70	69	↑ 1
	Chemistry	59	74	50	51	56	57	1 ↓
	Earth & Marine Sciences	103	172	76	103	82	56	↑ 26
	Environmental Sciences	38	70	66	50	40	24	↑ 16
	Geography	51	72	47	53	67	46	↑ 21
	Materials Science	39	28	25	17	26	33	7 ↓
	Mathematics	66	44	39	53	57	52	↑ 5
	Physics & Astronomy	69	76	101	140	157	110	↑ 47
	Psychology	33	28	10	15	15	16	1 ↓
	Statistics	32	41	38	49	77	65	↑ 12



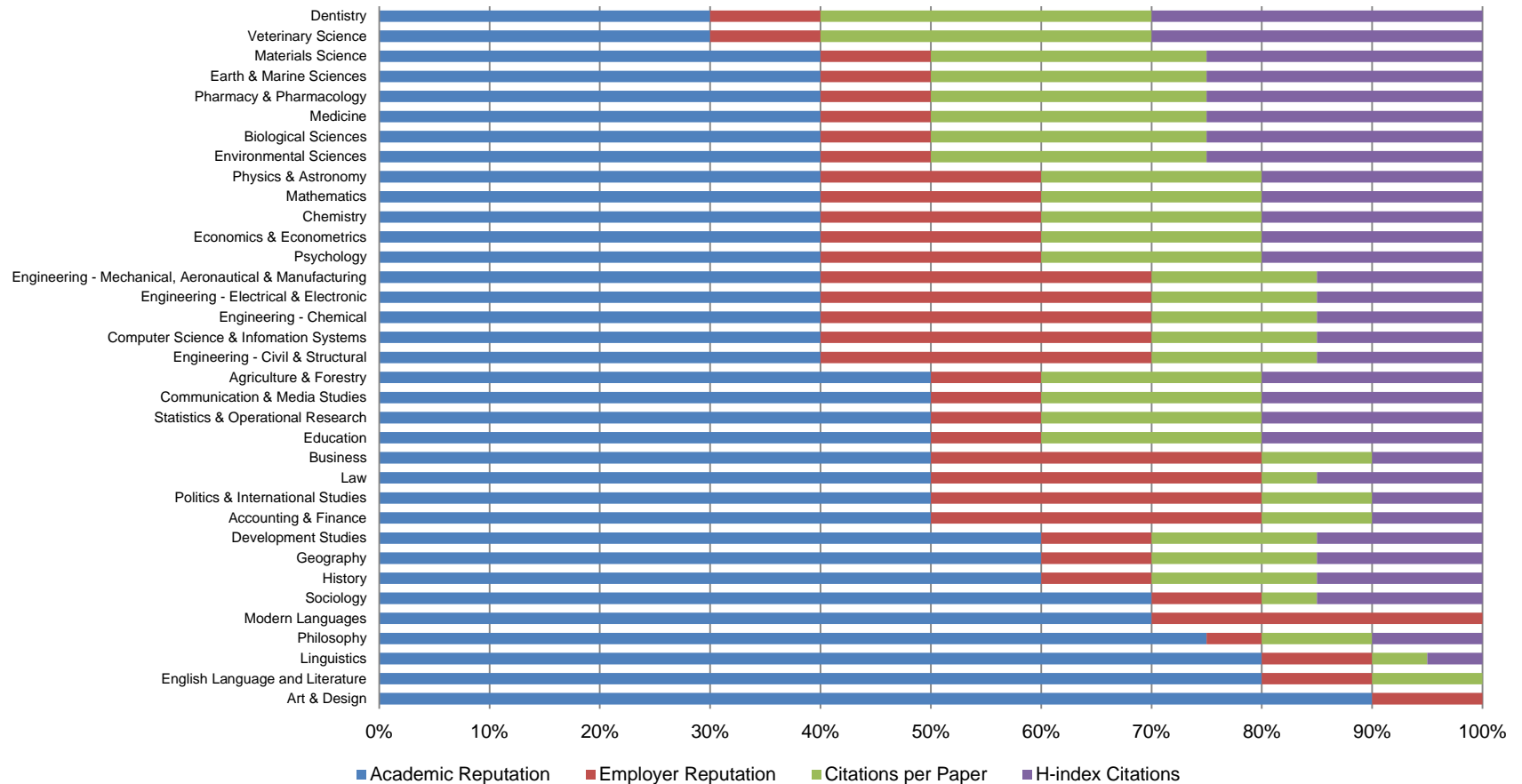
# UNSW's Performance on the 2016 QS Ranking By Subject Highlights

6 Subjects ranked in top 20	14 Subjects ranked in top 21-50
Accounting & Finance (13)	Business & Management Studies (24)
Law (13)	Environmental Sciences (24)
Engineering - Civil & Structural (16)	Art & Design (29)
Engineering - Mineral & Mining (16)	Engineering – Chemical (33)
Psychology (16)	Materials Science (33)
Architecture & Built Environment (19)	Engineering – Mechanical (34)
	Computer Science & Info Systems (35)
	Social Policy & Administration (38)
	Economics & Econometrics (38)
	Communication & Media Studies (40)
	Engineering - Electrical (43)
	Medicine (46)
	Geography (46)
	Education (48)



# QS Subject Rankings 2015 Methodology - Indicator Weights

QS Subject Rankings Indicator Weights



# Shanghai Jiao Tong (Global Ranking of Academic Subjects – Engineering) 2016 Results for the Go8

## Go8 World rank

	<b>Chem</b>	<b>Civ</b>	<b>Elec</b>	<b>Enr</b>	<b>Env</b>	<b>Mat</b>	<b>Mech</b>
The University of New South Wales	=80	40	66	=14	=83	=65	=64
The University of Queensland	26		=286	=99	10	=60	=148
The Australian National University			=152		=52	=298	=189
The University of Melbourne	=158		=132		=52	=73	=246
The University of Western Australia	=254	=89	=231	=102	=74	=440	=212
Monash University	=63	=41		=134	=99	=88	151
University of Sydney		=50	=106	=192	=114	149	=138
The University of Adelaide	=260	=75	=241	=154	157	=535	=290

## Go8 National rank

	<b>Chem</b>	<b>Civ</b>	<b>Elec</b>	<b>Enr</b>	<b>Env</b>	<b>Mat</b>	<b>Mech</b>
The University of New South Wales	3	1	1	1	6	2	1
The University of Queensland	1		9	4	1	1	3
The Australian National University			4		3	7	6
The University of Melbourne	5		3		3	3	8
The University of Western Australia	7	7	7	5	5	9	7
Monash University	2	2		6	8	4	4
University of Sydney		4	2	9	10	5	2
The University of Adelaide	8	5	8	7	11	13	9

Questions ...

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