

Inquiry into Defence Industry in NSW

Committee Hearing at Nowra on 29 June 2017

University of Wollongong
(Prof Valerie Linton and Mark Roberts)

QUESTION ON NOTICE No 1

The Hon. JOHN GRAHAM: *How does the New South Wales funding compare to the Victorian model?.....I would be interested to hear if you could take that on notice.*

UOW RESPONSE

New South Wales – Defence Industry Network

Cash income for 2017/18 is just over \$1.9M comprised of:

- NSW Govt (Dept of Industry) contribution - \$1,250,000
- University Membership fees - \$360,000
- PhD scholarships (paid by member universities) – understood to be around \$313,000

Total ‘in-kind’ support is valued at \$785,000 provided mainly by the member universities and DST Group. Therefore, total resources available for the NSW DIN for 2017/18 is around \$2.7M.

Victoria – Defence Science Institute

The Defence Science Institute (DSI), it is housed at the University of Melbourne and is a collaboration between DST Group, the Victorian Government and all of the Victorian Universities. UOW couldn’t find any budget information in the public domain, but it is understood to be on a similar scale. Both the Victorian DSI and the NSW DIN operate as similar models. On the DSI website it states:

“The Defence Science Institute aims to be a primary source for facilitating R&D connections that foster a globally engaged, competitive and innovative defence and national security sector.”

“The DSI was established in 2010 within the University of Melbourne. It is funded jointly by the State Government of Victoria, the Commonwealth Government’s Defence Science and Technology Organisation (DSTO) and the University of Melbourne.

The Defence Science Institute harnesses the capabilities of Victoria’s universities to deliver integrated multi-disciplinary solutions for the defence sector and facilitate the growth of defence science research networks between academia, DSTO and defence industry.

The Defence Science Institute is run by the DSI Executive. The Executive is guided by an advisory board and a research leaders forum, and it oversees five research programmes that align to Defence research priorities. Each programme is led by a senior researcher from DSTO or Academia, who oversees the establishment of DSI research projects. DSI has supported over 50 research projects and invested more than \$1 million dollars into research and research-related activities within the state of Victoria.”

QUESTION ON NOTICE No. 2

The Hon. MICK VEITCH: *I am an apology for tomorrow; I will be elsewhere. During a previous Committee inquiry we looked at nanotechnology and we visited the University of Wollongong campus. I was very impressed then by what it was doing. I am from regional New South Wales. The University of Wollongong trawls a large number of students from my part of the State—Tumut, Young and so on. Where are you drawing these students from for these courses? What is the structure of the courses?*

Professor LINTON: *Do you mean undergraduate engineering courses?*

The Hon. MICK VEITCH: *Yes. I am interested in both—undergraduate and postgraduate.*

UOW RESPONSE

The University has prepared the attached tables which cover:

1. UOW Onshore Engineering Enrolments by NSW Regions/ACT, Interstate and International
2. UOW Onshore Engineering Enrolments by Country of Origin
3. UOW Onshore Engineering Enrolments by Program

Please note that there are slight variations in the data across the 3 tables due to daily movements in enrolment numbers.

In summary, as at July 2017 (start of Session 2) there were slightly less than 3,000 onshore students enrolled across UOW's 36 Engineering related postgraduate and undergraduate programs.

Of these, around 1,200 (40%) are international students, around 70 are from interstate and the remainder (about 1,700 are from NSW). Of the approximately 1,700 Engineering students from within NSW, around 500 come from regions outside Sydney, Hunter and the Illawarra.

UOW Onshore Engineering Enrolments by NSW Regions/ACT, Interstate & International Origin (as at July 2017)			
	Postgraduate	Undergraduate	Total
ACT	3	50	53
Bega Valley		19	19
Central Sydney	6	19	25
Central West	1	74	75
Eurobodalla		26	26
Far West		1	1
Gosford/Wyong		4	4
Hunter	4	23	27
Kiama	1	54	55
Murray		33	33
New England		16	16
North Coast	1	33	34
Northern Sydney	3	17	20
Orana		13	13
Riverina	1	76	77
Shellharbour		94	94
Shoalhaven	1	92	93
South Eastern	2	49	51
South Western Sydney	12	198	210
Southern Sydney	5	67	72
Sutherland	5	202	207
West Central and North West Sydney	5	13	18
West Sydney		18	18
Wingecarribee	2	57	59
Wollongong	8	389	397
Interstate (Australia)	35	34	69
International Students	725	480	1205
Total Enrolments	820	2151	2971

UOW International Onshore Engineering Enrolments by Country of Origin (as at 19 July 2017)			
Country of Origin	Postgraduate Coursework	Undergraduate Coursework	Total
ARGENTINA	1		1
AZERBAIJAN	1		1
BANGLADESH	12	20	32
BHUTAN		2	2
BRAZIL		1	1
CAMBODIA	1	1	2
CHINA P.R.C.	186	197	383
COLOMBIA	1		1
EGYPT	3	2	5

FIJI	1		1
FRANCE	7	1	8
HONDURAS		1	1
HONG KONG		6	6
INDIA	275	33	308
INDONESIA	3	1	4
IRAN	31	3	34
IRAQ	1		1
ITALY	1	1	2
JORDAN	3		3
KENYA	1	2	3
KUWAIT		2	2
LEBANON	1		1
MACAU (SAR OF CHINA)		1	1
MALAYSIA		45	45
MONGOLIA		1	1
MYANMAR		1	1
NEPAL	62	14	76
NIGERIA	5		5
NORWAY	1	2	3
OMAN	1		1
PAKISTAN	65	21	86
PAPUA NEW GUINEA		1	1
RUSSIAN FEDERATION	4		4
SAUDI ARABIA	15	11	26
SERBIA		1	1
SOUTH AFRICA		2	2
SOUTH KOREA		2	2
SRI LANKA	4	43	47
TAIWAN	3	3	6
THAILAND	6	4	10
TURKEY	4	2	6
U.S.A.	1	1	2
UNITED ARAB EMIRATES		1	1
VIETNAM	2	33	35
Grand Total	702	462	1164

UOW Onshore Engineering Coursework Enrolments by Program (as at 19 July 2017)			
Program	Postgraduate	Undergraduate	Total
Bachelor of Engineering		529	529
Bachelor of Engineering - Bachelor of Arts		4	4
Bachelor of Engineering - Bachelor of Commerce		35	35
Bachelor of Engineering - Bachelor of Computer Science		9	9
Bachelor of Engineering - Bachelor of Laws		4	4

Bachelor of Engineering - Bachelor of Mathematics		9	9
Bachelor of Engineering - Bachelor of Science		24	24
Bachelor of Engineering (Double Major)		9	9
Bachelor of Engineering (Honours) - Bachelor of Arts		10	10
Bachelor of Engineering (Honours) - Bachelor of Commerce		52	52
Bachelor of Engineering (Honours) - Bachelor of Computer Science		26	26
Bachelor of Engineering (Honours) - Bachelor of Exercise Science		7	7
Bachelor of Engineering (Honours) - Bachelor of Laws		8	8
Bachelor of Engineering (Honours) - Bachelor of Mathematics		24	24
Bachelor of Engineering (Honours) - Bachelor of Science		23	23
Bachelor of Engineering (Honours) - Bachelor of Science (Physics)		23	23
Bachelor of Engineering (Honours) (Double Majors)		32	32
Bachelor of Engineering (Honours) (Scholar) (Double Major)		8	8
Bachelor of Engineering (Honours) (Scholar) (Single Major)		72	72
Bachelor of Engineering (Honours) (Single Major)		1159	1159
Bachelor of Engineering (Scholar)		32	32
Bachelor of Journalism - Bachelor of Engineering		1	1
Bachelor of Journalism - Bachelor of Engineering (Honours)		2	2
Diploma of Engineering (2 session)		23	23
Diploma of Engineering (3 session)		32	32
Graduate Certificate in Electrical Power Engineering	8		8
Graduate Certificate in Engineering Asset Management	9		9
Graduate Certificate in Rolling Stock Engineering	3		3
Graduate Diploma in Electrical Engineering	1		1
Master of Electrical Power Engineering	18		18
Master of Engineering	675		675
Master of Engineering Asset Management	28		28
Master of Engineering Management	32		32
Master of Professional Engineering	3		3
Master of Professional Engineering (Informatics)	8		8
Master of Rolling Stock Engineering	9		9
Grand Total	794	2157	2951