## **Research Snapshot**

October 2015

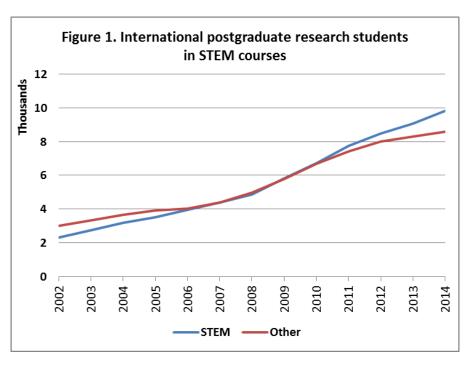
## International students studying science, technology, engineering and mathematics (STEM) in Australian higher education institutions

This snapshot provides an overview of international student enrolments in science, technology, engineering and mathematics (STEM) courses at higher education institutions in Australia in 2014.

Australian Government Department of Education and Training

Just over a quarter or 64,248 of international student enrolments in the higher education sector were enrolments in STEM courses. In 2014, more than half (53.4%) of postgraduate research enrolments were in STEM related courses (Table 1).

Figure 1 illustrates the trend in international postgraduate research enrolments in STEM and other courses in the thirteen years from 2002 to 2014. In 2014, there were 9,844 enrolments in STEM courses, an 8.5% increase on the 9,069 enrolments recorded in 2013. This compares with the average annual growth rate for STEM enrolments of 12.8% per year over the 2002 to 2014 period.



Students from China contributed the largest share (20.7%) of postgraduate research enrolments in STEM courses in 2014. Iran accounted for the next largest share of enrolments with 7.3%, followed by Malaysia (5.9%) and India (5.5%).

In 2014, 31.5% of all postgraduate research students at Australian higher education institutions were international students. Even higher proportions were in STEM fields, including Engineering and Related Technologies (54.2%), Information Technology (51.6%) and Agriculture, Environmental & Related studies (45.6%)(Table 1, far right column).

## Table 1. International student enrolments in Higher Education<sup>1</sup>: STEM Fields by Level of study, 2014

	Level of Study				International student
	Under-	Post- graduate	Post- graduate	TOTAL (Higher	proportion of total students in post- graduate research <sup>2</sup>
Broad Field Of Education	graduate	(Research)	(Other)	education)	E 4 20/
Engineering & Related Technologies	15,050	4,320	7,038	-,	
Information Technology	9,045	780	11,387	21,212	51.6%
Agriculture, Environmental & Related Studies	1,332	617	792	2,741	45.6%
Natural & Physical Sciences <sup>3</sup>	7,464	3,926	1,889	13,279	38.1%
Mathematics related <sup>4</sup>	202	201	205	608	36.2%
All other broad field of Education	105,954	8,607	70,413	184,974	21.6%
Total (Higher education)	139,047	18,451	91,724	249,222	31.5%

<sup>1</sup> International student data is available at the Department of Education and Training's website at <u>https://internationaleducation.gov.au/research/international-student-data/pages/default.aspx</u>. The calendar year 2014 data extracted from YTD June 2015 data set used in this Research Snapshot.

<sup>2</sup> Sourced from unpublished *Student 2014 Full Year data: Selected Higher Education Statistics* from the University Statistics Unit at: <u>university-statistics@education.gov.au</u>

<sup>3</sup> Excludes Mathematics related.

<sup>4</sup> A sub-category of 'Natural and Physical Sciences' and comprises Mathematical Sciences, Mathematics and Statistics.

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