

# Enrolments in VET training packages by industry skills council 2002–2010

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Table 1 below summarises student load in qualifications that are part of training packages by the Industry Skills Councils (ISCs). To compare programs that vary markedly in length of delivery, the figures are not of individual students enrolled but of full-year training equivalents (FYTEs) or student load. FYTEs also indicate the resources expended because funding is allocated by student load, not student enrolments. FYTEs are analogous to equivalent full-time student load (EFTSL) in higher education and to equivalent full-time students. This measure is calculated by the National Centre for Vocational Education Research on the hours of delivery a student receives: 720 hours of delivery = 1 FYTE. This formula has been used at least since the Williams committee of inquiry into education and training in 1979.

Student load in training package qualifications is highly skewed towards the low end: within each training package many qualifications have a very small or no student load, and a few qualifications have a relatively high student load. Because of this an average figure would be misleading as a measure of what is typical for each ISC, as the few qualifications with high student load would distort the figure. For skewed distributions a better measure is the median or middle. This is the value at which half of the observations are below and half the observations are above. The median is also sometimes expressed as the 50th percentile — the value at which 50% of observations are above and 50% are below. Such distributions are commonly further described by giving a range within which most observations occur, generally the range between the 25th percentile and the 75th percentile, that is the range within which the middle 50 per cent of observations lie. This is illustrated in Figure 1.

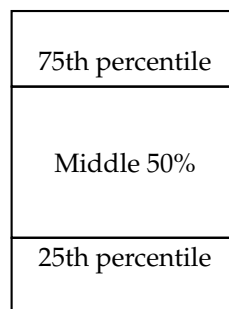


Figure 1: Illustration of the middle 50% of observations as between the 25th and 75th percentiles.

Table 1 also shows the percentage of qualifications with FYTE in different ranges (no FYTE, between 1 and 19 FYTE, between 20 and 49 FYTE etc.) and cumulative percentage as another indication of the distribution.

For example, in 2010, in the qualifications within the training packages accredited by the AgriFoods ISC, student load ranged widely from 0 to 2240 FYTEs. However, most student loads were much lower than this

upper figure: the median student load was 45 FYTEs, and the middle 50% of the student load values, that is the values between the 25th and 75th percentiles, fell between 8 and 165 FYTEs. Only 25% of packages had a student load above 165 FYTEs, and only 14% of packages had a student load of 500 or more FYTEs.

## Method

Full year training equivalents were downloaded from the online VOCSTATS database on the National Centre for Vocational Education Research website, for each qualification associated with each ISC for each year in the period 2002–2010, the period available in VOCSTATS. VOCSTATS includes each qualification for each year, regardless of whether or not the qualification was current in a particular year. Therefore considerable recoding was needed to consider student load only for the years in which each qualification was current.

A qualification was considered current from the year after it was endorsed to allow time for implementation. The year each qualification was endorsed was derived from the qualification code which includes the year its parent training package was endorsed. A qualification was considered current until the year after it was superseded to allow the qualification to be taught out. Years in which qualifications were superseded were found by using the search functions on the national VET qualification register, <training.gov.au>. If a training package hadn't been superseded it was considered current until 2010.

It was then possible to define each qualification as current in 2010 or not, and to determine the years between 2002 and 2010 each qualification had been current. This results in conservative figures for each qualification because it includes only those years in which it is most likely that each qualification would have its highest student load.

The figures are given for 2010 FYTEs, and for mean FYTEs over 2002–2010. For the calculation of the '2010 only' figures, only those qualifications current in 2010 were used. For the '2002–2010' figures, the mean or average student load for each qualification was obtained by dividing its total student load over the years it was current by the number of years it was current. For example, if a qualification was current for 3 years from 2002 to 2003 and 2004 and in those years it had FYTEs of 10, 20 and 30 it would have a mean student load of 20 FYTE (10 + 20 + 30 divided by 3).

Table 1: Summary of FYTEs in qualifications in each industry skills council, mean over 2002–2010 and in 2010 only

		2002-2010		2010 only	
<b>AgriFood</b>	No. of qualifications	398		173	
	Minimum	0		0	
	Maximum	1716		2240	
	25th percentile	4		8	
	<b>Median (50th percentile)</b>	<b>22</b>		<b>45</b>	
	75th percentile	81		165	
			%	Cumul. %	%
% qualifications in FYTE ranges	0	11	11	9	9
	1–19	36	47	27	36
	20–49	19	66	16	52
	50–99	12	78	15	67
	100–499	17	94	19	86
	500+	6	100	14	100
			%	Cumul. %	%
<b>Community Services and Health</b>	No. of qualifications	289		139	
	Minimum	0		0	
	Maximum	8486		9390	
	25th percentile	11		13	
	<b>Median (50th percentile)</b>	<b>58</b>		<b>94</b>	
	75th percentile	258		381	
			%	Cumul. %	%
% qualifications in FYTE ranges	0	3	3	6	6
	1–19	29	32	22	28
	20–49	15	48	16	44
	50–99	12	60	9	53
	100–499	25	84	25	78
	500+	16	100	22	100
			%	Cumul. %	%
<b>Construction and Property Services</b>	No. of qualifications	208		101	
	Minimum	0		0	
	Maximum	6701		4630	
	25th percentile	6		9	
	<b>Median (50th percentile)</b>	<b>32</b>		<b>41</b>	
	75th percentile	155		179	
			%	Cumul. %	%
% qualifications in FYTE ranges	0	8	8	10	10
	1–19	37	45	29	39
	20–49	12	57	15	54
	50–99	13	70	13	66
	100–499	17	87	22	88
	500+	13	100	12	100
			%	Cumul. %	%

*Note: All figures are rounded to the nearest whole number and hence not all figures sum to 100.*  
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		2002-2010	2010 only		
<b>ElectroComms and Energy Utilities</b>	No. of qualifications	171	92		
	Minimum	0	0		
	Maximum	8675	5550		
	25th percentile	3	6		
	<b>Median (50th percentile)</b>	<b>13</b>	<b>29</b>		
	75th percentile	69	116		
			%	Cumul. %	%
% qualifications in FYTE ranges	0	12	12	5	5
	1-19	42	53	36	41
	20-49	18	71	22	63
	50-99	12	83	10	73
	100-499	12	95	21	94
	500+	5	100	7	100
<b>ForestWorks</b>	No. of qualifications	58	27		
	Minimum	0	0		
	Maximum	164	189		
	25th percentile	2	1		
	<b>Median (50th percentile)</b>	<b>12</b>	<b>13</b>		
	75th percentile	33	59		
			%	Cumul. %	%
% qualifications in FYTE ranges	0	14	14	19	19
	1-19	53	67	41	59
	20-49	17	85	11	70
	50-99	7	91	7	78
	100-499	9	100	22	100
	500+				
<b>Government</b>	No. of qualifications	156	100		
	Minimum	0	0		
	Maximum	239	309		
	25th percentile	1	1		
	<b>Median (50th percentile)</b>	<b>7</b>	<b>11</b>		
	75th percentile	26	33		
			%	Cumul. %	%
% qualifications in FYTE ranges	0	20	20	20	20
	1-19	51	71	46	66
	20-49	17	88	20	86
	50-99	8	96	8	94
	100-499	5	100	6	100
	500+				

Note: All figures are rounded to the nearest whole number and hence not all figures sum to 100.

		2002-2010		2010 only	
<b>Innovation and Business</b>	No. of qualifications	511		261	
	Minimum	0		0	
	Maximum	11310		9647	
	25th percentile	7		7	
	<b>Median (50th percentile)</b>	<b>50</b>		<b>83</b>	
	75th percentile	339		375	
			%	Cumul. %	%
% qualifications in FYTE ranges	0	11	11	12	12
	1-19	25	36	21	33
	20-49	14	50	10	43
	50-99	9	59	9	52
	100-499	22	81	26	78
	500+	19	100	22	100
			%	Cumul. %	%
<b>Manufacturing</b>	No. of qualifications	410		175	
	Minimum	0		0	
	Maximum	6035		8496	
	25th percentile	4		9	
	<b>Median (50th percentile)</b>	<b>18</b>		<b>42</b>	
	75th percentile	101		186	
			%	Cumul. %	%
% qualifications in FYTE ranges	0	8	8	7	7
	1-19	43	52	31	38
	20-49	12	64	14	53
	50-99	11	74	11	64
	100-499	17	92	23	87
	500+	8	100	13	100
			%	Cumul. %	%
<b>Service</b>	No. of qualifications	323		137	
	Minimum	0		0	
	Maximum	6190		8456	
	25th percentile	12		0	
	<b>Median (50th percentile)</b>	<b>91</b>		<b>82</b>	
	75th percentile	308		549	
			%	Cumul. %	%
% qualifications in FYTE ranges	0	12	12	26	26
	1-19	18	30	11	37
	20-49	14	44	7	45
	50-99	8	52	7	52
	100-499	31	83	20	72
	500+	17	100	28	100
			%	Cumul. %	%

Note: All figures are rounded to the nearest whole number and hence not all figures sum to 100.

		2002-2010		2010 only	
<b>SkillsDMC</b>	No. of qualifications	199		151	
	Minimum	0		0	
	Maximum	495		951	
	25th percentile	1		0	
	<b>Median (50th percentile)</b>	<b>7</b>		<b>4</b>	
	75th percentile	31		27	
			%	Cumul. %	%
% qualifications in FYTE ranges	0	17	17	25	25
	1-19	49	66	44	69
	20-49	15	80	13	82
	50-99	8	88	8	89
	100-499	12	100	10	99
	500			1	100
			%	Cumul. %	%
<b>Transport and Logistics</b>	No. of qualifications	130		60	
	Minimum	0		0	
	Maximum	2234		3356	
	25th percentile	2		3	
	<b>Median (50th percentile)</b>	<b>23</b>		<b>23</b>	
	75th percentile	89		90	
			%	Cumul. %	%
% qualifications in FYTE ranges	0	17	17	10	10
	1-19	32	49	32	42
	20-49	18	66	18	60
	50-99	12	78	17	77
	100-499	15	93	13	90
	500	7	100	10	100
			%	Cumul. %	%
<b>All ISCs</b>	No. of qualifications	2853		1416	
	Minimum	0		0	
	Maximum	11310		9647	
	25th percentile	4		4	
	<b>Median (50th percentile)</b>	<b>25</b>		<b>34</b>	
	75th percentile	133		187	
			%	Cumul. %	%
% qualifications in FYTE ranges	0	11	11	13	13
	1-19	35	46	29	42
	20-49	15	61	14	56
	50-99	10	71	10	66
	100-499	19	90	20	86
	500	11	100	14	100
			%	Cumul. %	%

Note: All figures are rounded to the nearest whole number and hence not all figures sum to 100.