

Electrical Engineering Associate Professionals	New South Wales (NSW)
ASCO Code: 3123	June 2007
Labour market rating	Shortage
Comment: <i>There is a shortage of associates with experience in commissioning and testing electrical equipment in industries such as manufacturing, rail transport and energy resources.</i>	

Occupational demand

Labour Force Survey data for Australia indicate that employment of electrical engineering associates was flat in the ten years to May 2007 and it is likely that the trend was similar in NSW. The consensus of industry contacts was that demand for this occupation over the past decade has been adversely affected by changes in drafting technology which has made the drafting process more efficient and has allowed other engineering professionals to more readily modify drawings. Shorter-term changes in demand for electrical engineering associates depend largely on activity in the electricity, manufacturing and construction industries. Activity in these industries has been mixed over the past year. Employment in the electricity, gas and water industry was flat in 2006-07. The Construction Forecasting Council (CFC) estimates that the value of non-residential construction in NSW grew by only 3.0 per cent over the same period (in nominal dollars) following growth of 13.4 per cent in 2005-06. However, the Australian Industry Group / Price-Waterhouse Coopers *Survey of Manufacturing* shows that manufacturing production in NSW increased in the June quarter 2007, which was the fourth consecutive quarterly increase in production following three quarters of decline from December 2005.

Occupational supply

There is a number of diploma courses which would be an entry path to this occupation or, depending on the modules taken by the student, to the closely related occupation of electronic engineering associate. DEEWR estimates that completions in TAFE diplomas in electrical, electronics and telecommunications engineering were stable at about 350 persons a year from 2002 to 2006. This represents a training rate (course completions as a percentage of the employed workforce) of 4.7 per cent based on an estimated combined workforce of electrical engineering associates and electronic engineering associates of 7000. Net immigration of electrical engineering associates to NSW from overseas averaged 12 persons a year over the five years to 2005-06 which indicates that this is a minor supply source relative to diploma course completions.

Employer and industry comments/current labour market

The DEEWR survey of recently-advertised vacancies for electrical engineering associates found that 75 per cent of positions were filled within six weeks of advertising. The surveyed vacancies fell into two broad categories: those for electrical engineering drafters and those for associates engaged in commissioning, testing and repairing industrial equipment. Almost all employers seeking electrical engineering drafters filled their vacancies within the survey period, although positions in manufacturing generally attracted fewer suitable applicants than those in the electrical power and building services industries. Shortages were more evident for associates with experience in commissioning and testing electrical equipment, with the majority of employers unable to fill such vacancies or having considerable difficulty in doing so. Positions requiring these skills proved hard to fill across a number of industries including manufacturing, rail transport and energy resources.

Labour market outlook

Demand for electrical engineering associates should remain firm over the short term. The CFC expects the value of non-residential construction in NSW to increase by about 23 per cent in 2007-08, while the June quarter 2007 *Survey of Manufacturing* pointed to an improved outlook for manufacturing production over the next year. No significant increase in supply from course completions is expected over the short-term and therefore shortages in a number of industry sectors are likely to continue in 2007-08.