

Mechanical Engineering Associate Professionals		Queensland
ASCO Code: 3125		March 2007
Labour market rating	Shortage	
Comment: <i>Senior associates and those with 3D software experience were most difficult to recruit.</i>		

Occupational demand

Mechanical engineering associate professionals design, build, test and maintain machinery using design software, drawing equipment and hand tools. Employment opportunities vary in line with activity in consultancy firms and developments in the manufacturing, mineral resources, electricity, gas and water supply industries. Demand in Queensland is currently high, with large numbers of vacancies coming from manufacturing and materials handling and logistics firms. The factors elevating demand include Queensland's booming mineral resources sector, the need for improved logistics in order to significantly increase export volumes and the growing use of automation to overcome skill shortages. DEEWR's Skilled Vacancies Index indicates that the annual number of vacancies recorded in Queensland for this group almost tripled over the year to March 2007.

Occupational supply

Formal qualifications for these occupations can be at diploma, advanced diploma or associate degree level. Relevant diploma and advanced diploma programs are available through registered training organisations while an associate degree is available at the University of Southern Queensland (USQ) and Central Queensland University. Data could only be obtained for the associate degree program at USQ, where enrolments and graduations have remained essentially constant since 2001. The average number commencing each year has been 25 and wastage is seemingly high for this program, with an average of only about 7 graduations each year. Direct international migration may assist in supplying this occupation, with a net gain to the State of 37 self-identified mechanical engineering associate professionals in 2005-06. However, Labour Force Survey data show recent increases in the numbers employed in Queensland that are much larger than can be attributed to formal education and training or overseas migration, indicating that interstate migration and on-the-job training are also likely to be significant sources of supply.

Employer and industry comments/current labour market

In this year's survey, 21 per cent of the vacancies for these occupations were filled within six weeks of advertising. More than 50 per cent of the applicants were considered unsuitable due to their having limited or no experience. In most cases where applicants had experience it was outside of the employing industry. All levels of proficiency and qualifications were in demand but most positions were for long-term experience and/or competency in 3D modelling. Workers with five years or more experience were very difficult to recruit and finding applicants with ten years or more experience was said to be impossible. Respondents claimed that the absence of suitable applicants at this level is due to skilled people moving on into management roles. A number of contacts reported that associates have traditionally been engaged in large-team project work where their skills have been confined to one area. Aware of this issue, some employers now insist on rotating workers to ensure that they acquire a wide range of skills. Recruitment specialists consider overseas applicants to be a viable option for many jobs, particularly those primarily requiring software competency rather than highly developed communication skills.

Labour market outlook

As Queensland's mineral resources industry continues to expand its production capacity, supporting industries such as manufacturing and materials handling firms are also expanding. Much of the growth in demand for mechanical engineering associate professionals is coming from these areas. Supply from all sources presently falls well short of meeting demand. It is therefore expected that the current shortage in this occupational group will continue through 2007.