



Mechanical Engineer

ANZSCO 2335-12

New South Wales
April 2019

Current labour market rating: Shortage

There is a shortage of Mechanical Engineers across New South Wales in April 2019. Employers were able to fill less than half of the surveyed vacancies and indicated a high demand for Mechanical Engineers in NSW.

Key research findings

- Employers filled 36 per cent of vacancies with an average of 53.6 applicants, 21.8 qualified applicant and 0.8 suitable applicants per vacancy.
- Vacancies surveyed were across a wide range of sectors including construction, transport, manufacturing, health, commercial, retail and government.
- All applicants required tertiary qualifications in Mechanical Engineering, with the majority of employers seeking chartered professional engineer status or working towards chartership, and technical skills with proficiency in CAD, AutoCAD, Finite Element Analysis (FEA) and SolidWorks.
- Employers also sought a working knowledge of the Australian and NSW building standards and codes, close proximity to the vacancy, stable work history and alignment with company culture and values.
- Many employers struggled to find suitable applicants, with over 95 per cent of qualified applicants considered unsuitable. This was largely due to applicants lacking relevant industry specific skills and work experience, such as not having 3-5 years' experience.
- Several employers and recruitment agencies stated the need to use networking, referrals and head hunting to find suitable applicants.

Demand and supply

- The value of building activity in NSW rose by 6.4 per cent over the year to March 2019 after rising by 4.7 per cent the previous year. Engineering construction rose by 6.7 per cent in the year to March 2019 following an increase of 24.9 per cent in the previous year. Total value of construction work increased by 6.5 per cent over the year to March 2019 compared with 11.4 per cent over the year to March 2018.

2019 Survey Results¹

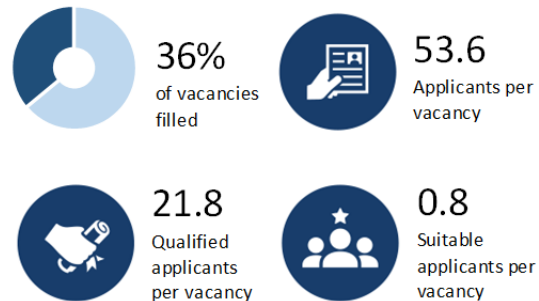
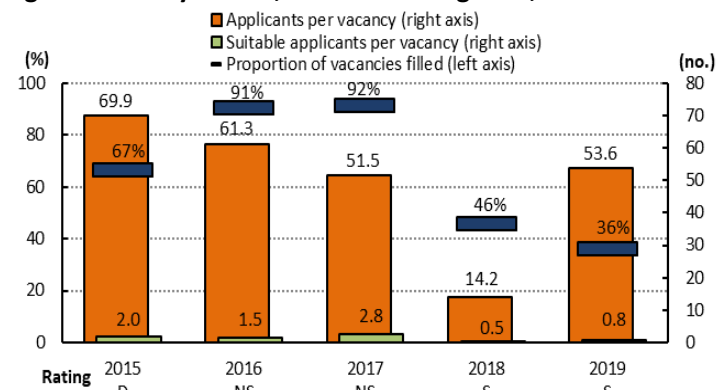


Figure 1: Survey results, Mechanical Engineer, 2015 to 2019



Key to ratings: D = Recruitment difficulty; NS = No shortage; S = Shortage

- Manufacturing production at the national level declined by 1.5 per cent over the year to March 2019 while electricity, gas, water and waste services sector rose by only 0.2 per cent over the same period.
- In NSW, the average number of bachelor degree completions specialising in mechanical engineering was 355 in the three years to 2017. This was above the average of 314 for the previous three years and the average for the past decade of around 310.
 - Commencements averaged 266 in the two years to 2017, which was lower than the average of 468 for the previous three-year period and the average of around 390 over the past decade.
- The number of temporary resident skilled visas granted averaged 48 per year in the five years to 2017-18.

¹ The methodology underpinning this research is outlined at [Skill Shortage Research Methodology](#)

Additional Data Sources: ABS, Construction Work Done, Preliminary, March 2019 (8755.0), Table 4 and Table 8, chain volume measures, original; ABS, Australian National Accounts: National Income, Expenditure and Product, March 2019 (5206.0), Table 6, chain volume measure, trend series; Department of Education, Higher Education Student Data Collection, 2017, customised tables; Department of Home Affairs, Temporary Resident (Skilled) Visas Granted