



ANZSCO 2335-12 Mechanical Engineer

Queensland
April 2018

Current labour market rating: No shortage

Previous labour market rating (April 2017): No shortage

Comments

This year, the majority of mechanical engineer vacancies in both metropolitan and regional areas were filled indicating that there is no shortage of the occupation.

Survey results¹

- The employers surveyed reported that 82 per cent of vacancies were filled within six weeks of advertising, compared with 93 per cent last year.
 - The proportion of vacancies filled was 83 per cent in metropolitan areas and 80 per cent in regional areas.
- There was an average of 54.2 qualified applicants per vacancy this year in comparison with 60 in the previous year.
 - Metropolitan vacancies attracted an average of 70 applicants per vacancy while regional employers attracted an average of 35 applicants per vacancy.
- There were 5.1 suitable applicants per vacancy on average, an increase from 4.3 in 2017.
- Overall, 79 per cent of all applicants were qualified.
- Of the 79 per cent that were qualified, 37 per cent were considered suitable.
 - Sixteen per cent of qualified metropolitan and 73 per cent of qualified regional applicants were considered suitable.

Unsuitable applicants

- While there were a large number of applicants per vacancy, around 21 per cent were not qualified.
- The most common reasons employers considered that qualified applicants were unsuitable were a lack of experience or a lack of specific experience in specialisations such as water and waste water, civil, mining, renewable energy, infrastructure, building services and project management, particularly in regional areas.
- Some applicants were also considered unsuitable due to poor applications and resumes, being a poor cultural fit to the organization, or lack of additional registration such as Registration of Professional Engineers of Queensland (RPEQ).

¹ The methodology underpinning this research is outlined at [Skill Shortage Research Methodology | Department of Jobs and Small Business - Document library, Australian Government](#) and can also be accessed by the QR code.



Demand and supply trends

- Although predominantly employed in engineering consultancies², demand for mechanical engineers generally depends on activity levels in the manufacturing industry and industries such as oil and gas, construction and mining. With a measured recovery of mining activity in Queensland and growth in manufacturing and construction, demand for mechanical engineers has increased over the year.
 - In Queensland, employment in both manufacturing and mining increased over the year to February 2018 by 3.4 per cent and 8.5 per cent respectively.³
 - Over the 12 months to December 2017 Australian Bureau of Statistics (ABS) data shows an increase of 9.36 per cent in the trend value of engineering construction activity in Queensland. This followed a four-year decline to December 2016 after a peak in 2013. The latest figure for the year to December 2017 is still almost 58 per cent lower than the 2013 figure.⁴
 - ABS original estimates for 2017 show increases in the value of engineering construction work done over the year in both the public and private sectors. Private sector work was predominantly in heavy industry, while the majority of public work was carried out on roads, highways and subdivisions across the state.⁵
- The number of internet vacancies for the broader occupation group of industrial, mechanical and production engineers has been increasing steadily since July 2016, following a four-year decline. The number of vacancies advertised on line for the year to April 2018 increased by around 67 per cent from the previous 12 months.⁶
 - Labour Force data indicates that over the 12 months to February 2018 the number of people employed as mechanical engineers rose by around 33 per cent.⁷
 - Unless working under the supervision of a registered engineer, mechanical engineers must register with the Board of Professional Engineers of Queensland (BPEQ).
 - Latest data indicates that 1520 mechanical engineers reside in Queensland and are registered with BPEQ, an increase of around 4.25 per cent since 2016.⁸
- Entry to this profession is via completion of a Bachelor of Engineering (Honours) degree.
 - Department of Education and Training data show the number of students commencing a bachelor level mechanical engineering degree in 2016 declined by around 34.5 per cent since the series peak in 2015.⁹
 - The number of graduates completing mechanical engineering degrees increased by approximately 48 per cent between 2014 and 2016.¹⁰

² ABS, Labour Force, February 2018, Department of Jobs and Small Business trend

³ Ibid

⁴ ABS, 8762.0 - Engineering Construction Activity, Australia, December 2017, Table 2 Value of Work Done, States and Territories, Chain Volume Measures, Trend

⁵ ABS, 8762.0 - Engineering Construction Activity, Australia, December 2017, Table 19 Value of Work Done, by Sector, Queensland, Original

⁶ Department of Jobs and Small Business, Internet Vacancy Index, March 2018, 12 month moving average

⁷ ABS, Labour Force, February 2018, Department of Jobs and Small Business trend

⁸ Queensland Government Data, Register of Professional Engineers, 30 January 2018

⁹ Department of Education and Training, Higher Education Student Data Collection, 2016, customised tables

¹⁰ Ibid