

...covers Engineering Professionals not elsewhere classified. It includes Aeronautical Engineers, Agricultural Engineers, Biomedical Engineers, Engineering Technologists, Environmental Engineers and Naval Architects.

**Note: All the occupations in this unit group with the exception of 233999 Other Engineering Professionals nec [not elsewhere classified] are included on the Skilled Occupation List (SOL).**

### Indicative Skill Level

Most occupations in this unit group have a level of skill commensurate with a Bachelor degree or higher qualification. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification (ANZSCO Skill Level 1).

### Skilled Occupation Criteria

#### **Long-lead time**

Other Engineering Professionals meet the criteria for long lead time, as entry to this occupation requires a substantial training commitment.

- ▶ Employment as an Engineering Professional generally requires the completion of a university qualification of at least four years study (full-time equivalent), such as a Bachelor of Engineering.
- ▶ Of apprentices and trainees, 72% take 3 years or more (full-time equivalent) to complete their training (*NCVER Apprentices and Trainees, 2010*).

#### **High use**

Other Engineering Professionals meet one aspect of the criteria for high use, showing that the skills which people have acquired through education and training are being deployed for the uses intended.

- ▶ Of new graduates employed as Other Engineering Professionals, 75% had studied in a related field, such as engineering and related Technologies (*Australian Graduate Survey, 2009*).
- ▶ As professionals, Other Engineering Professionals are expected to have a level of skill commensurate with a Bachelor degree or higher qualification. Of those employed as Other Engineering Professionals, 100% were found to possess this level of skill (*ABS Survey of Education and Work, 2010*).<sup>1</sup>

#### **High risk**

Other Engineering Professionals also meet the criteria for high risk/high disruption. This indicates that the occupation is important for the effective operation of an enterprise and/or the broader economy.

- ▶ Other Engineering Professionals are required to be registered with a professional board in some states and territories, such as Victoria, Queensland, Tasmania and the Australian Capital Territory. Membership of Engineers Australia may also be required in order to gain professional recognition.

---

<sup>1</sup> Analysis for the Skilled Occupations List (SOL) was conducted using the latest available data, including the 2010 ABS Survey of Education and Work (SEW). Percentages may therefore differ from those cited in the 'Occupation Trends' analysis (over the page), which uses alternative sources in some instances (e.g. the 2008 ABS Survey of Education and Work). Small sample sizes for some occupations may also result in fluctuations in the SEW data between 2008 and 2010. The specific data sources used for the Occupation Trends analysis can be found on the Skills Australia website: <http://www.skillsaustralia.gov.au/SOLsummariesheets.shtml>.

- ▶ Other Engineering Professionals are important to meet government policy priorities at both the Commonwealth and state level. These include innovations in aerospace and nautical engineering, and initiatives in environmental engineering for sustainable living.

The occupation 233999 Other Engineering Professionals nec [not elsewhere classified] has not been included on the Skilled Occupations List (SOL) due to the unspecified nature of the skills involved.

Engineering Professionals nec is group of niche occupations where employer-sponsored arrangements may be more appropriate to meet demands in particular areas.

For assessment for independent skilled migration, those with suitable qualifications may qualify under other engineering occupations included on the SOL.

## Occupation trends

### **ANZSCO: 2339**

### **Other Engineering Professionals**

<b>Employment level</b>	11,400 Almost all workers are employed full-time (92.8%).
<b>6 digit employment (2006 Census)</b>	233911 Aeronautical Engineer 950 233912 Agricultural Engineer 100 233913 Biomedical Engineer 550 233914 Engineering Technologist 240 233915 Environmental Engineer 1110 233916 Naval Architect 311 233999 Engineering Professionals, nec 1530
<b>Employment growth</b>	Over the five years to August 2010, employment increased by 25.7% (compared with growth of 12.1% for all occupations). Employment is expected to decline by 2.5% over the next five years (compared with projected growth of 9.5% for all occupations).
<b>Unemployment rate</b>	Low (around 0.8%) compared with all occupations.
<b>Educational profile</b>	Around 83.2% have a Bachelor degree or higher qualification.
<b>Vacancies</b>	The Internet Vacancy Index (IVI) rose by 16.4% over the 12 months to September 2010 to 111.2 (March 2006=100). Vacancies for all occupations increased by 19.4%.
<b>Gender</b>	Around 14.2% of workers are female (compared with 45.4% for all occupations).
<b>Labour turnover</b>	Around 5.3% of workers leave this occupation in a year compared with 13.1% for all occupations.
<b>Age profile</b>	The median age is 37.8 years and 41.0% are aged 45 years and over (compared with 38.5% for all occupations).
<b>Earnings</b>	Median full-time weekly earnings (before tax) are high (\$1380).
<b>Graduate outcomes</b>	Not applicable
<b>Skill shortages</b>	Not assessed.

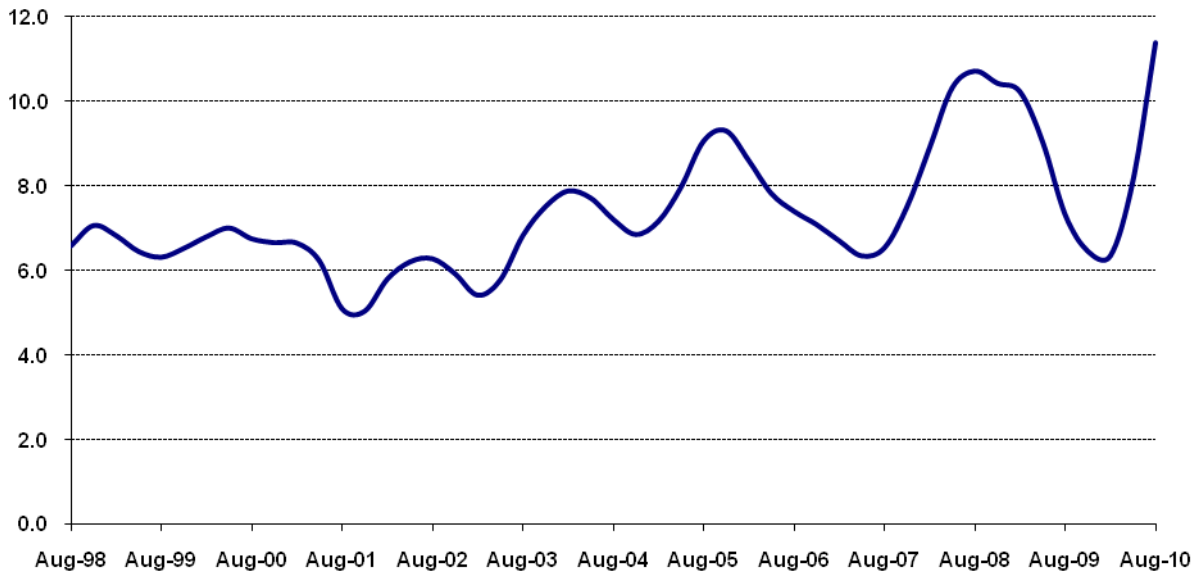
### **Labour market**

Not assessed.

### **Summary**

This is a grouping of very small, specialised engineering-related occupations which have differing labour markets and demand factors. Employment has fluctuated over the past five years, and while employment increased overall it is expected to fall slightly over the next five years. Vacancy levels have risen over the past year but remain low compared with pre recession levels. Unemployment is low.

Other Engineering Professionals  
Employed Persons ('000s) Aug 1998 to Aug 2010



Internet Vacancy Index (IVI) - 3 Monthly Average - Nov 2006 - Sept 2010  
Other Engineering Professionals (March 2006 = 100)

