

CAREER FACT SHEET

Mining Engineers

Snapshot

Mining Engineers plan and direct the engineering aspects of locating and extracting minerals, petroleum and natural gas from the earth.

How many are employed in this occupation?	11,400
What are the average weekly earnings for full time workers?	\$3,252
How does unemployment compare with other occupations?	Above Average
What are the job prospects for this occupation?	High
What will be the likely future employment growth for the next five years?	Very Strong Growth

Main employing industries

Mining; Professional, Scientific and Technical Services

Tasks

This occupation may include associated occupations with varying tasks.

- conducting preliminary surveys of mineral, petroleum and natural gas deposits with prospectors, geologists, geophysicists, other mineral scientists and other engineers to determine the resources present, the feasibility of extracting the reserves, and the design and development of the extraction process
- preparing operation and project cost estimates and production schedules, and reporting progress, production and costs compared to budget
- determining the most suitable methods of ore extraction taking account of such factors as depth of overburden, and attitude and physical characteristics of deposits and surrounding strata
- preparing plans for tunnels and chambers, location and construction of mine shafts, layout of mine development and the application of appropriate mining techniques, often using computer modelling
- assessing the natural, technical, financial and safety risks associated with the phases of the project development, construction and operations
- determining the safety of processes, order of extraction and safety of mine walls, evaluating the risk of slippage and advising on the prevention of slippage and rock falls
- planning and coordinating the utilisation of labour and equipment consistent with efficiency targets, statutes, safety guidelines and environmental conditions
- planning and conducting research and providing advice on engineering operations for the exploration, location and extraction of petroleum and natural gas
- determining location for drilling
- deciding on types of derrick and equipment including seabed platforms
- devising methods of controlling the flow of oil and gas from wells

INDUSTRY OVERVIEW

Mining

If you are fascinated by the process of extracting minerals from the earth, are mathematically-minded with keen problem-solving abilities, would enjoy the challenge of operating big machinery, or want to be part of the discovery of the next oil field, then the Mining Industry is definitely a sector you should be exploring on your journey to discover a career. The Mining Industry has been a powerful driver of the Australian economy for some time, having experienced some of the fastest industry job-growth rates over the past ten years, and there are predictions of further growth. The Mining sector employs people from a range of skill sets, and some roles offer the chance for travel interstate, or even abroad to work for companies that have interests overseas.

Possible job pathways

- Automotive Electricians
- Cartographers and Surveyors
- Earthmoving Plant Operators
- Metal Fitters and Machinists
- Mining Engineers
- Production Managers



Mining

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