

Construction is constructive

The construction industry alone accounts for about 6 per cent of the gross domestic product, and employs about 800,000 people – 8 per cent of the workforce. It's a very important player in the Australian economy.

The construction industry can be divided into three areas:

Residential building accounts for roughly half of the industry; it consists of the construction of residences such as houses and flats.

Non-residential building is skyscrapers, shops, hotels etc and is (very) roughly a quarter of the industry's turnover.

Engineering construction is things like roads, bridges, and water and sewerage facilities.

Engineering a construction project

Engineering and construction. It's all about making stuff.
Real stuff. Useful stuff. Cool stuff. *Smart Start* stuff.



There are recognised skills shortages in construction and engineering.

Being civil

Civil construction is the building of the infrastructure of communities. Hospitals, highways, tunnels, bridges, railways, dams, airports and ports.

If you specialise in these massive civil projects then the world might shrink to the size of a grapefruit. In other words, your skills can offer you opportunities wherever in the world these projects are.

One day you could be building a tunnel under the Black Sea, the next you're reclaiming sea in Thailand for an airport. These huge projects are fascinating. With the right training in civil construction – through a traineeship, TAFE course or a university degree – you may be able to work anywhere in the world.

Engineering is engineering stuff

Engineers are great. They do all this neat stuff like ... hold on, what do they do? In fact, what is an engineer?

Engineers are concerned with developing solutions to practical problems. They apply mathematics and scientific knowledge while considering all the technical challenges, from structure to legislation.

The work of engineers can be viewed as the link between needs of society and what society does.

It's like a cross between art and science, because you're creating something out of science. Some describe it as the imagination becoming reality. Or science behaving in the real world.

Engineers want a finished product that has a very specific use. Sometimes it's a beautiful product too. Think about the Sydney Harbour Bridge.

But what about chemical engineers? Same sort of thing. They get chemicals to act in a way that is useful.

It's varied too. Because there's always a practical result of engineering projects, engineers work across different areas. For instance, a mining engineer will need to know about structures, geology, airflows – pretty much everything.