



AUSTRALIAN STEEL INSTITUTE

# CAREERS IN STEEL ENGINEER



Structural design engineers can be engaged by anyone who requires professional advice regarding the design, rehabilitation, repair and adequacy of structures. They use their technical expertise to translate their clients' structural concepts into reality, combining safety with economy and elegance.

## WHAT DOES A STEEL DESIGN ENGINEER DO?

- ✓ Prepares accurate structural drawings, plans and specifications
- ✓ Conducts analysis and calculations for structural integrity, stability and load-bearing capacity
- ✓ Ensures structures can withstand external forces like high winds and earthquakes
- ✓ Undertakes site inspections, administers contracts and manages multiple projects
- ✓ Assesses the properties and suitability of construction materials
- ✓ Ensures all designs meet project and local specifications

## WHAT QUALIFICATIONS DO I NEED?

There is a variety of courses and degrees that will prepare you for a career in structural steel design engineering. These courses require completion of Year 12, preferably with advanced maths, physics and chemistry.

Examples of courses:

- Bachelor of Engineering
- Bachelor of Engineering (Civil)
- Master of Engineering



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## CAREER PATHWAYS

Some structural engineers work for consulting engineering companies. Others work for building contractors involved in construction management. A site engineer might supervise erection, planning construction and monitoring of costs.

## WHAT SKILLS DO I NEED?

- ✓ Verbal and written communication skills
- ✓ Problem solving and critical thinking
- ✓ Advanced maths, physics and chemistry
- ✓ Practicality and creativity
- ✓ Ability to read plans and drawings
- ✓ Enthusiasm, punctuality and precision

## AVERAGE SALARY

A typical entry level position starts from \$80,000 per year and with more experience and expertise can increase to \$185,000 + per year\*.

\*Salary or wage variations may depend on region and state, industry sector or the amount of overtime worked.

## ABOUT THE ASI

A member-based organisation, the Australian Steel Institute (ASI) is the nation's peak body representing the entire steel supply chain from the manufacturing mills right through to end users in building and construction, heavy engineering and manufacturing. With over 5,000 members, we support more than 600 companies.

## CONTACT US

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