The only accredited fire safety engineering degree in Australia.

Member of the International Master of Science in Fire Safety Engineering

Bachelor of Engineering (Honours)
Master of Engineering

Fire Safety Engineering
Exceptional opportunities

Fire Safety Engineering covers the fundamentals of fire safety engineering including fire dynamics, prescriptive and performance based design, and structural fire safety engineering. The subjects are highly multi-disciplinary and cater to many engineering backgrounds in order to provide the fundamental skills required by modern fire safety engineers.

Accreditation

UQ offers the only accredited fire safety engineering degree in Australia.

Guaranteed placement

Through our industry partners, UQ will guarantee industry placements for up to 15 students. 100 per cent of our students have also secured internships prior to graduating from UQ.

Careers

From designing for fire safety in the built environment to accounting for fire risks in the oil and gas industry, there is currently great demand for professionals with skills in fire safety engineering in a wide variety of fields and industries.

Study Plan

What you will study as part of the Bachelor of Engineering(Honours) / Master of Engineering (Fire Safety Engineering) program.

**Year 1**
- ENGG1100 Engineering design
- ENGG1400 Engineering mechanics: Statics and Dynamics
- MATH1051 Calculus and Linear algebra 1
- Elective
- ENGG1200 Engineering modelling and problem solving
- MATH1052 Multivariate calculus and ODE’s
- Elective

**Year 2**
- CIVL2330 Structural mechanics
- STAT2201 Analysis of engineering and scientific data
- MATH2000 Calculus & Linear algebra 2
- CIVL2410 Traffic flow theory and analysis
- CIVL2340 Introduction to structural design
- CIVL2131 Fluid mechanics for civil and environmental engineers
- CIVL2210 Fundamentals of soil mechanics
- CIVL2360 Reinforced concrete structures and concrete tech.

**Year 3**
- CIVL340 Structural analysis
- CIVL3140 Catchment hydraulics: Open channel flow and design
- CIVL3210 Geotechnical engineering
- FIRE3700 Introduction to fire safety engineering
- CIVL3350 Structural design
- CIVL3141 Catchment hydrology
- CIVL3420 Transportation systems engineering
- CIVL3510 Introduction to project management

**Year 4**
- CIVL4514 Civil design 1
- Elective
- Elective
- FIRE4610 Fire Design for Implicit safety
- CIVL4516 Civil design 3
- Elective
- ENGG4900 Prof. practice and the business environment
- FIRE7620 Fire Dynamics

**Year 5**
- FIRE640 Fire Dynamics Laboratory
- FIRE7660 Structural Fire Engineering Laboratory
- FIRE7680 Fire Design for Explicit Safety
- ENGG7701 Engineering grand challenges
- FIRE7500 Research thesis