

# Energy, mining and resources

15 (YEARS

These critical sectors underpin all areas of society—from powering our cities and vehicles, to the smartphones in our pockets.



make history.



Ranked #15 globally for Mineral and Mining Engineering\*



Ranked #7 globally for Petroleum Engineering^

100

Ranked top 100 globally for Energy Science and Engineering\*



Steady employment predicted (5.9% by 2026)†



# Australia's only university teaching mine automation

Through our Institute for Sustainability, Energy and Resources, the University of Adelaide has led Australia in the development of fully integrated, Al-driven resource value chains. We're helping many energy, mining and resources companies incorporate or enhance self-learning extraction-and-processing control systems to extract greater value from increasingly complex resources - faster, safer and at lower cost. And we can pass that knowledge on to you.

Our recent industry experience includes collaborating with:

- BHP, OZ Minerals and others on mining and processing control platforms
- Boart Longyear, a global drilling giant, to allow generation of geological information in close to real time, directly at the drill site
- Orica, an Australia-based multinational commercial explosives and blasting systems specialist, to apply digitally integrated AI to their blast mode.

### Full-spectrum energy expertise

We also have significant, proven expertise in all areas of the energy sector, with experience advising on—and leading—projects relating to:

- optimal power system and resources planning, modelling and operation
- renewable energy generation and hybrid systems
- energy storage, including advanced batteries and underground hydrogen
- critical minerals, advanced energy materials and catalysts
- microgrids and electric vehicles infrastructure.

We're highly capable in the areas of environmental sustainability and social licence. And again, we can pass on all this knowledge to you.

### Career prospects

Employment growth for the majority of energy, mining and resources roles range broadly from moderate to very strong, with the industry projected to grow by up to 5.9% by 2026<sup>†</sup>.

- ^ QS World University Rankings by Subject, 2023.
- \* Academic Ranking of World Universities by Subject, 2023.
- † Australian Government, Labour Market Insights, 2023.

**Degrees** 

### Undergraduate

- Bachelor of Engineering (Honours)(Civil)
- Bachelor of Engineering (Honours) (Electrical and Electronic)
- Bachelor of Engineering (Honours) (Environmental and Climate Solutions)
- Bachelor of Engineering (Honours)(Mining)
- Bachelor of Engineering (Honours)(Petroleum)
- Bachelor of Engineering (Honours)(Petroleum) with major
- Bachelor of Science
- Bachelor of Science (Honours)
- Bachelor of Science (Advanced)
- Bachelor of Science (Advanced)(Honours)
- Bachelor of Science (Mineral Geoscience)

### Postgraduate coursework

- Master of Engineering (Aerospace)
- Master of Engineering (Chemical)
- Master of Engineering (Civil and Environmental)
- Master of Engineering (Civil and Structural)
- Master of Engineering (Electrical)
- Master of Engineering (Electronic)
- Master of Engineering (Mechanical)
- Master of Engineering (Mechatronic)
- Master of Engineering (Mining)
- Master of Materials Engineering
- Master of Petroleum Engineering

## **Further enquiries**

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