



Teaching exploration in 2020 at the UQ-School of Earth & Environmental Sciences



What do we offer for students aiming to work in minerals (and energy) exploration?

Undergraduate level: solid background formation in second year with a range of applied courses in third year:

Ore Deposits & Exploration

Energy Resources

Exploration Geochemistry

Ore Body Modelling

Advanced Earth Observation Sciences

Field Geology: Mapping in the Outback

Honours: Geological Sciences

Postgraduate level: Master of Mineral Resources

Masters by course work targeting mining industry professionals aiming to acquire new skills

CPD courses (Cognate Centres)

Plenty of fieldwork activities

Ore Deposits & Exploration Geology



Students mapping hydrothermal alteration at Ban Ban Springs

Field Geology: Mapping in the Outback



Mapping & field techniques in both simple and complex metamorphic terrains at Mt Isa

Very hands on courses

Exploration Geochemistry



Modern developments in understanding geochemical systems & techniques applied to mineral exploration:

Sample collection and QA/QC systems

Analytical methods

Data interpretation using IoGas

Identification and prioritization of exploration targets



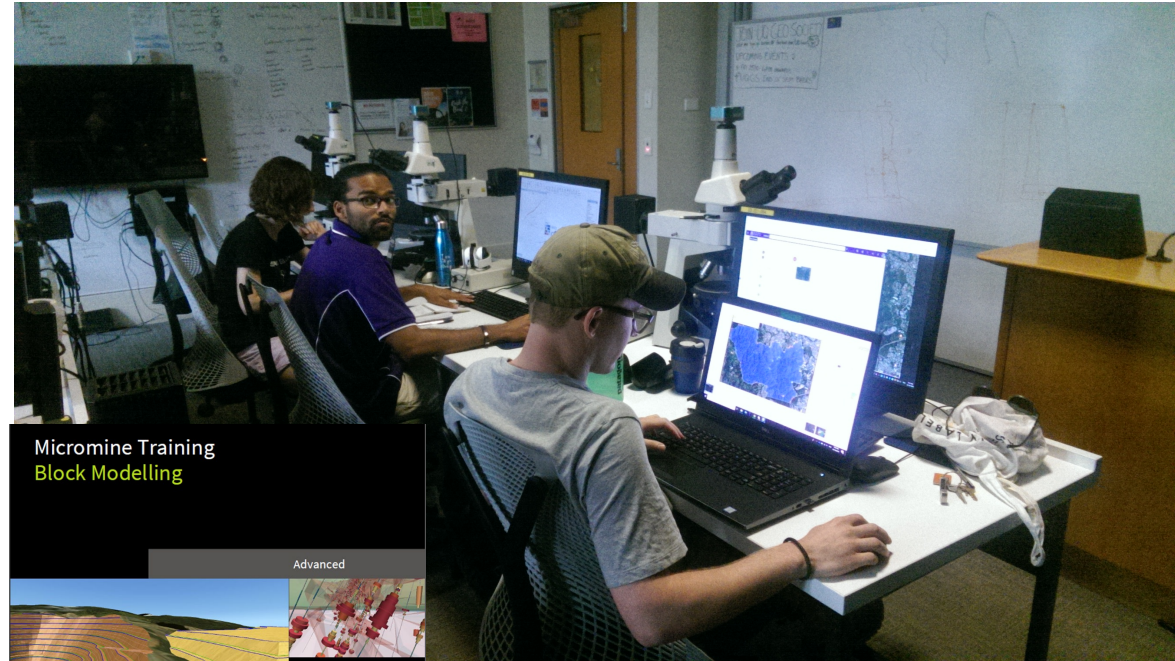
“Feel that everything we did in this course really prepared me for the industry, and that I would have made a fool of myself in my first geology job if I didn't do this course” – Testimonial from former student

... Courses using the latest technology

Ore Body Modelling

Geological modelling and resources estimations using mining packages:

- Data collection and QA/QC systems
- 3D geological modelling
- Resource estimations
- JORC report



“This course was fantastic. I have learnt so much from the course, and not just from Surpac. This course is a great eye opener to what industry geological work is like. Very few subjects offer such knowledge and opportunities. What I enjoyed most was the course content and the practical application of my geological knowledge to create ore systems” –
Testimonial from former OB Modelling student

Dark clouds ahead.....

- ✓ Large first year classes but number of earth sciences students graduating have dropped year on year since 2015
- ✓ Second year class numbers good but include a range of disciplines (e.g., geological sciences, environmental sciences, archaeology)
- ✓ Only 15 students starting the third year in 2020
- ✓ Low number of students require the reduction of third year courses to maintain program sustainability
- ✓ Some industry focused courses may not be offered in the future



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Thank you

Prof Sue Golding

s.golding1@uq.edu.au

A/Prof Carlos Spier

c.spier@uq.edu.au

School of Earth and Environmental Sciences