



 ENVIRONMENT, SUSTAINABILITY & MINE CLOSURE | CQUniversity

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### Alumnus gives back to next gen mining engineers

From working on mine sites whilst juggling the challenge of external study, Patrick Doig has paved the way towards his future.

The CQUniversity alumnus has built a career as a mining executive, and now with over a decade of experience, has returned to his alma mater to impart his knowledge to the future generation of mining engineers.

Mr Doig recently presented a series of guest lectures to CQUniversity Engineering students that are undertaking the mine planning and design elective, giving them an opportunity to learn from one who had walked in their shoes.

As Head of Partnerships at global mining technology company Deswik, Mr Doig said it was imperative to invest in the future leaders of the sector – which was why he jumped at the opportunity to return to where it all began.

"My study with CQUniversity was so important as it enabled me to continue on and obtain my full Bachelor of Engineering, which brought me into the mining industry. Engineering is a field that I absolutely love, and I've never looked back," Mr Doig said.

"This is a future I never saw for myself and I'm so excited by it – it's opened a lot of avenues that I was not even aware of, and so it's been great to come back to CQU and share with the students what's possible in this industry," he said.

With the focus of mining now shifting towards more sustainable practices, Mr Doig also ran a masterclass on Deswik's Enviro tools to provide the students with the necessary skills for the industry. Deswik's Enviro tools provide an integrated approach to environmental planning, including mining production, progressive and legacy rehabilitation, and mine closure.

"I wanted to come back to CQU and deliver these lectures to give back and share my experiences of being in this very program. A lot of students don't get that exposure from someone in the field who's been exactly where they are."

Mr Doig commenced his journey with CQUniversity in 2006 through a partnership with Anglo American, which enabled him to study an Associate Degree of Engineering while working in industry.

The opportunity provided Mr Doig with an articulating pathway into a Bachelor of Engineering, completing his final two years with Honours at the University of Queensland in 2012.

After several years with Anglo American, Mr Doig moved to Deswik where he initially began as a mining consultant before working his way to his current role as Head of Partnerships. He now oversees the training and implementation of mining engineering software at universities and looks after technology partnerships and resellers.

Partnered with 53 universities globally and with company sites spanning from Johannesburg to the Hunter Valley, Mr Doig said his career with Deswik was a future he never saw for himself.



*Engineering students learn from Mr Doig who taught about software technology for integrated mine closures*

Second-year Associate Degree of Engineering student Jasmine Collins traveled from Canberra, where she has been studying remotely, to CQUniversity's Rockhampton North campus for the workshop intensive.

Jasmine is working with the Department of Agriculture, Fisheries and Forestry while completing her degree and said she was excited to see the correlations between her work and her studies.

"The work I do in natural resources ties in with my studies, such as today when we're looking at geophysical scanning and electromagnetic scanning," Jasmine said.

"It's been amazing learning from Patrick about this CAD software as it's a step above the software I've used, and I've learnt a lot. I hope to go into mining rehabilitation so this is quite relevant for me, with drawing up plans and different consultancy aspects so this has been an amazing skill to get."

Third-year Bachelor of Engineering student Nicholas Storey has been gaining work experience through the practical component of his studies and said he had enjoyed being able to see more of what goes into mine planning through Patrick's expertise.

"With this software for example we can look at an open cut mine to prepare for closure, where the coal has been dug out and where the area requires filling in," Nicholas explained.

"We are able to simulate what the landscape would look like once the rehabilitation work is done, and we can use formulas to calculate pricing for dozers and other earth-moving equipment we'd require for the project."

Mr Doig said that especially with the current skills shortage, it was imperative that businesses started thinking about the next generation of mining engineers and those who would go on to become leaders of mining organizations in the future.

He encouraged students to implement self-care strategies to ensure longevity not only in their careers, but with their work-life balance.

"It's really important that our workplaces support us in our education; if we don't finish our studies, we'll get disgruntled with our life, our jobs, our employer and we're not going to have a sustainable career," Mr Doig said. "It's therefore important that both students and employers work to support the completion of an education."

"I look back on my beginnings with CQUniversity and I have so much to be thankful for because it's all given me a lot - and I'm absolutely thrilled to be able to do the work that I do now."



*Engineering students from the Mine Planning and Design Elective with academic leads Dr Andrew Hammond and Associate Professor Aruna Jayasuriya and CQU alumnus Mr Doig*